

Cleanup Action Report

**Former Brookdale Golf Course
1802 Brookdale Road East
Tacoma, Washington
VCP Site No. SW 1672**

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August 31, 2022

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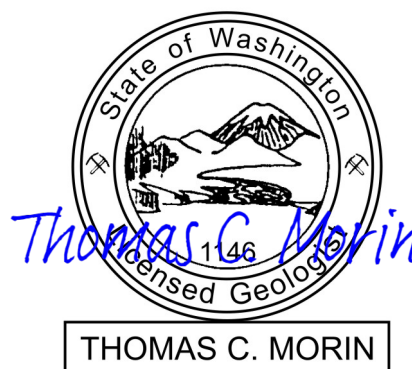
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TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	SITE IDENTIFICATION AND DESCRIPTION	2
2.1	Site Discovery and Regulatory Status	2
2.2	Property and Site Location	2
2.3	Site Setting	3
2.4	Physiographic Setting	3
3.0	PROPERTY DEVELOPMENT AND HISTORY	3
3.1	Past Uses and Facilities	3
3.2	Current and Future Use and Facilities	4
3.3	Zoning	4
3.4	Transportation and Roads	4
3.5	Utilities and Water Supply	4
3.6	Potential Sources of Contamination, Identification of Release	4
4.0	NATURAL CONDITIONS	5
4.1	Soil	5
4.2	Groundwater	5
4.3	Surface Water	5
4.4	Natural Resources and Ecological Receptors	5
5.0	ENVIRONMENTAL INVESTIGATION/INTERIM ACTION SUMMARY	6
5.1	Remedial Investigation and Focused Feasibility Study	6
5.1.1	Limited Pesticide Investigation – Robinson Noble (2016)	6
5.1.2	Focused Subsurface Investigation – EPI (2017)	7
5.1.3	Continued Subsurface Investigation – EPI (2018)	8
5.2	Cleanup Action Plan	9
5.3	Supplemental Remedial Investigations	9
5.3.1	Supplemental Remedial Investigation (North of Clover Creek) – TRC (2020) ...	9
5.3.2	Supplemental Remedial Investigation (South of Clover Creek) – TRC (2021)	10
5.4	Terrestrial Ecological Evaluation	12
6.0	CONTAMINANT OCCURRENCE AND MOVEMENT	12
7.0	CONCEPTUAL SITE MODEL	12
8.0	SOIL CLEANUP LEVELS	13
9.0	SELECTION OF CLEANUP REMEDY FOR THE PROPERTY	14

10.0 CLEANUP ACTION	15
10.1 Methodology.....	15
10.2 Remedial Excavation	16
10.2.1 AOI-1	16
10.2.2 AOI-2	16
10.2.3 AOI-3	16
10.2.4 AOI-4	17
10.2.5 AOI-5	17
10.2.6 AOI-6	17
10.2.7 AOI-7	18
10.2.8 AOI-8	18
10.2.9 AOI-9	18
10.2.10 AOI-10	19
10.2.11 AOI-11	19
10.2.12 AOI-12	19
10.2.13 AOI-13	20
10.2.14 AOI-14	20
10.2.15 AOI-15	20
10.2.16 AOI-16	21
10.2.17 AOI-17	21
10.2.18 AOI-18	21
10.2.19 AOI-19	22
10.2.20 AOI-20	22
10.2.21 AOI-21	22
10.2.22 AOI-22	23
10.2.23 AOI-23	23
10.2.24 AOI-24	23
10.2.25 AOI-25	24
10.2.26 AOI-26	24
10.2.27 AOI-27	24
10.2.28 AOI-28	25
10.2.29 AOI-29	25
10.2.30 AOI-30	25
10.2.31 AOI-31	26
10.2.32 AOI-32	26
10.2.33 AOI-33	26
10.2.34 AOI-34	27
10.2.35 AOI-35	27
10.2.36 AOI-36	27
10.2.37 Maintenance Compound Area.....	28
10.3 Groundwater.....	29
10.4 Waste Disposal	29
11.0 CONCLUSIONS.....	29
12.0 LIMITATIONS.....	30

TABLES

Table 1	Key Information (embedded)
Table 2	Established CULs (embedded)
Table 3	Soil Analytical Data: AOI-1
Table 4	Soil Analytical Data: AOI-2
Table 5	Soil Analytical Data: AOI-3
Table 6	Soil Analytical Data: AOI-4
Table 7	Soil Analytical Data: AOI-5
Table 8	Soil Analytical Data: AOI-6
Table 9	Soil Analytical Data: AOI-7
Table 10	Soil Analytical Data: AOI-8
Table 11	Soil Analytical Data: AOI-9
Table 12	Soil Analytical Data: AOI-10
Table 13	Soil Analytical Data: AOI-11
Table 14	Soil Analytical Data: AOI-12
Table 15	Soil Analytical Data: AOI-13
Table 16	Soil Analytical Data: AOI-14
Table 17	Soil Analytical Data: AOI-15
Table 18	Soil Analytical Data: AOI-16
Table 19	Soil Analytical Data: AOI-17
Table 20	Soil Analytical Data: AOI-18
Table 21	Soil Analytical Data: AOI-19
Table 22	Soil Analytical Data: AOI-20
Table 23	Soil Analytical Data: AOI-21
Table 24	Soil Analytical Data: AOI-22
Table 25	Soil Analytical Data: AOI-23
Table 26	Soil Analytical Data: AOI-24
Table 27	Soil Analytical Data: AOI-25
Table 28	Soil Analytical Data: AOI-26
Table 29	Soil Analytical Data: AOI-27
Table 30	Soil Analytical Data: AOI-28
Table 31	Soil Analytical Data: AOI-29
Table 32	Soil Analytical Data: AOI-30
Table 33	Soil Analytical Data: AOI-31
Table 34	Soil Analytical Data: AOI-32
Table 35	Soil Analytical Data: AOI-33
Table 36	Soil Analytical Data: AOI-34
Table 37	Soil Analytical Data: AOI-35
Table 38	Soil Analytical Data: AOI-36
Table 39	Soil Analytical Data: Maintenance Compound Area
Table 40	Groundwater Analytical Results

FIGURES

Figure 1	General Vicinity Map
Figure 2	Site Representation Showing Remedial Excavation Areas
Figure 3	Typical Cross-Section of Remedial Excavation
Figure 4	Remedial Excavation – AOI-1
Figure 5	Remedial Excavation – AOI-2
Figure 6	Remedial Excavation – AOI-3
Figure 7	Remedial Excavation – AOI-4
Figure 8	Remedial Excavation – AOI-5
Figure 9	Remedial Excavation – AOI-6
Figure 10	Remedial Excavation – AOI-7
Figure 11	Remedial Excavation – AOI-8
Figure 12	Remedial Excavation – AOI-9
Figure 13	Remedial Excavation – AOI-10
Figure 14	Remedial Excavation – AOI-11
Figure 15	Remedial Excavation – AOI-12
Figure 16	Remedial Excavation – AOI-13
Figure 17	Remedial Excavation – AOI-14
Figure 18	Remedial Excavation – AOI-15
Figure 19	Remedial Excavation – AOI-16
Figure 20	Remedial Excavation – AOI-17
Figure 21	Remedial Excavation – AOI-18
Figure 22	Remedial Excavation – AOI-19
Figure 23	Remedial Excavation – AOI-20
Figure 24	Remedial Excavation – AOI-21
Figure 25	Remedial Excavation – AOI-22
Figure 26	Remedial Excavation – AOI-23
Figure 27	Remedial Excavation – AOI-24
Figure 28	Remedial Excavation – AOI-25
Figure 29	Remedial Excavation – AOI-26
Figure 30	Remedial Excavation – AOI-27
Figure 31	Remedial Excavation – AOI-28
Figure 32	Remedial Excavation – AOI-29
Figure 33	Remedial Excavation – AOI-30
Figure 34	Remedial Excavation – AOI-31
Figure 35	Remedial Excavation – AOI-32
Figure 36	Remedial Excavation – AOI-33
Figure 37	Remedial Excavation – AOI-34
Figure 38	Remedial Excavation – AOI-35
Figure 39	Remedial Excavation – AOI-36
Figure 40	Remedial Excavation – Maintenance Compound

ATTACHMENTS

Attachment A	2016 Robinson Noble Limited Pesticide Investigation Letter Report and Laboratory Analytical Results
Attachment B	2017 and 2018 EPI Laboratory Analytical Results
Attachment C	2020 TRC Laboratory Analytical Results
Attachment D	2021 TRC Laboratory Analytical Results
Attachment E	TEE Cleanup Levels
Attachment F	Conceptual Site Model
Attachment G	2019 EPI Remediation Laboratory Analytical Results
Attachment H	Monitoring Well Construction Logs
Attachment I	2021 Groundwater Laboratory Analytical Results
Attachment J	Soil Disposal Documentation

ABBREVIATIONS AND ACRONYMS

Abbreviation/ Acronym	Definition
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amsl	Above mean sea level
AOI	Area of interest
bgs	Below ground surface
CAR	Cleanup Action Report
COC	Contaminant of concern
COPC	Contaminant of potential concern
CSI	Continued Subsurface Investigation
CSM	Conceptual Site Model
CUL	Cleanup level
DRO	Diesel-range organics
Ecology	Washington State Department of Ecology
EPA	Environmental Protection Agency
EPI	Environmental Partners, Inc.
FSI	Focused Subsurface Investigation
GRO	Gasoline-range organics
Ichijo	Ichijo USA Co., LTD.
MDL	Method detection limit
µg/L	Micrograms per liter
mg/kg	Milligrams per kilogram
MTCA	Model Toxics Control Act
Olson	Olson Brothers Excavating
ORO	Oil-range organics
Property	Former Brookdale Golf Course
RI/FFS	Remedial Investigation and Focused Feasibility Study
SIM	Selected Ion Measurement
SRI	Supplemental Remedial Investigation
TEE	Terrestrial Ecological Evaluation

Abbreviation/ Acronym	Definition
TRC	TRC Environmental Corporation
VCP	Voluntary Cleanup Program.
WAC	Washington Administrative Code

1.0 INTRODUCTION

TRC Environmental Corporation (TRC)¹ is pleased to submit this *Cleanup Action Report* (CAR) for the former Brookdale Golf Course (Site). The Site is located at 1802 Brookdale Road East, Tacoma, Washington (Figure 1). The Site consists of the area where contaminants from the general maintenance of the former Brookdale Golf Course have come to be located at concentrations exceeding applicable cleanup levels (CULs). The boundaries and orientation of the Site are shown on Figure 2.

Ichijo USA Co., Ltd. (Ichijo), the owner of the former Brookdale Golf Course, completed a cleanup action at the Site. The cleanup action was completed in accordance with the requirements of the Model Toxics Control Act (Chapter 70.105D Revised Code of Washington [RCW]) and its implementing regulations (Chapter 173-340 Washington Administrative Code [WAC]), which together are referred to as MTCA. The cleanup action consisted of the excavation and removal of all soil with concentrations of dieldrin (an organochlorine pesticide) exceeding MTCA Method B soil CULs for unrestricted land uses. Additionally, an isolated area of arsenic-impacted soils encountered during supplemental remedial investigation activities and a small area of petroleum-impacted soil encountered during the course of the cleanup action were excavated and removed from the Site. Together, these cleanup actions resulted in a final, permanent remedy for the Site. No further remedial action is necessary at the Site.

The Site is currently listed in the Confirmed and Suspected Contaminated Sites (CSCS) database maintained by the Washington State Department of Ecology (Ecology). Key information about the Site is provided in Table 1, below.

Table 1
Key Information

Ecology Facility Site ID Number	7758
Ecology Cleanup ID Number	14894
Voluntary Cleanup Program (VCP) Number	SW1672
Project Consultant for the Site	TRC Environmental Corporation 1180 NW Maple Street, Suite 310 Issaquah, Washington 98027 425-395-0010 Attn: Thomas Morin
Party Performing Cleanup Action	Ichijo USA Co., Ltd. 15135 Northeast 90th Street, Suite 200 Redmond, Washington 98052 Attn: Randy Barnett

¹ Prior work on the Site was performed by Environmental Partners, Inc. (EPI). EPI was acquired by TRC on December 27, 2019. For the purposes of this document, EPI and TRC may be used interchangeably.

2.0 SITE IDENTIFICATION AND DESCRIPTION

This section presents information about the Site, including its discovery and geographic setting.

2.1 Site Discovery and Regulatory Status

In 2018, Ichijo acquired the former Brookdale Golf Course (the Property). In 2020, Ichijo subdivided the Property for redevelopment into residential subdivision with single-family detached homes. The Site and surrounding area are currently being developed as a residential subdivision with single-family detached homes.

Prior to acquiring the Property, Ichijo performed an environmental assessment of the Property. This assessment determined that surface soils at the Property were impacted with the organochlorine pesticide dieldrin. The nature and extent of the pesticide impacts were further evaluated in subsequent investigations. The details of these investigations are provided in Section 5.0. Dieldrin was identified as the primary contaminant of concern at the Site; arsenic impacts to soils were identified in an isolated area of the Site. The lateral and vertical extent of soil containing dieldrin and arsenic at concentrations exceeding the selected CULs constitutes the "Site" that is the subject of this CAR.

Following the environmental investigations at the Property and prior to its redevelopment, Ichijo retained EPI to address the pesticide impacts at the Site. EPI prepared and submitted a *Cleanup Action Plan* (CAP), dated March 18, 2019. From June 13, 2019 to November 4, 2019, EPI oversaw and directed the implementation of the CAP. This included the excavation and removal of all soil containing dieldrin and arsenic at concentrations exceeding the applicable CUL. The cleanup action achieved compliance with the applicable CULs throughout the lateral and vertical limits of all the remedial excavations. Therefore, the cleanup action has met the standard point of compliance for soil throughout the Site. Additional details regarding the implementation of the CAP are provided in Section 10.0.

The remedial action complies with the requirements of MTCA based on the following:

- Soil CULs have been met throughout the Site without the need for a conditional point of compliance;
- Soil CULs have been achieved without the use of empirical demonstrations; and
- Institutional controls are not required to meet the soil CULs.

With the submittal of this CAR, Ichijo is requesting an unconditional No Further Action (NFA) determination for the Site.

2.2 Property and Site Location

The Site is located entirely within the boundary of the former Brookdale Golf Course. The Site encompasses approximately 145 acres. The legal tax description of the Site is as follows:

“Section 15 Township 19 Range 03 Quarter 43 SEG FOR TAX PURPOSES ONLY CANNOT BE SOLD OR SUBD WITHOUT PARCELS 8-002, 8-003, 03-19-22-5-007, 5-700 & 5-702 THAT POR OF PARCEL A OF ROS FOR BLA 2019-09- 10-5004 DESC AS FOLL L 2 OF SP 91-12-09-0414 TOG/W FOLL DESC PROP COM AT CENT OF SEC TH N 87 DEG 37 MIN 51 SEC W 258.5 FT TH N 02 DEG 15 MIN 47 SEC E 30 FT TO POB TH N 87 DEG 37 MIN 51 SEC W 330.94 FT TH N 02 DEG 04 MIN 19 SEC E 15 FT TH S 87 DEG 31 MIN 51 SEC E 206.91 FT TO BEG OF A CURVE TANG TO SD LI TH ELY NELY & NLY 46.34 FT ALG A CURVE CONCAVE TO NW HAVING A RAD OF 29.5 FT & A C/A OF 90 DEG TH N 02 DEG 22 MIN 09 SEC E TANG TO SD CURVE 71.62 FT TO BEG OF A CURVE TANG TO SD LI TH NLY 632.5 FT & A C/A OF 08 DEG 26 MIN 57 SEC TO A PT OF CUSP TH N 88 DEG 12 MIN 41 SEC W 139.62 FT TH S 01 DEG 47 MIN 19 SEC W 75.41 FT TH N 88 DEG 06 MIN 04 SEC W 105.03 FT TH N 02 DEG 04 MIN 19 SEC E 316.42 FT TH S 88 DEG 11 MIN 21 SEC E 332.44 FT TO S 02 DEG 15 MIN 47 SEC W 451.02 FT TO POB LY IN TCA 515 IN SEC 15 & CLASSIFIED CURRENT USE EXC THAT POR CYD TO P CO PER ETN 797928 TOG/W EASE & RESTRICTIONS OF REC OUT OF 1-702 SEG F-0328JU/CH 10-21-93CL 7428206DC 09/17/19 JP.”

The geographic coordinates for the Site are 47.12872° north latitude, 122.40784° west longitude. A site representation is depicted on Figure 2.

2.3 Site Setting

The Site is located within the City of Tacoma. The Site is bordered by Brookdale Road East to the north, 20th Avenue East to the east, 148th Street East to the south, and 14th Avenue East to the west. The Site is surrounded by residential neighborhoods located adjacent to the east, south, and west of the Site.

2.4 Physiographic Setting

The Site elevation ranges from approximately 350 feet above mean sea level (amsl) in the southern portion to approximately 320 feet amsl in the central and northern portions. The Site slopes gently to the north toward Clover Creek.

3.0 PROPERTY DEVELOPMENT AND HISTORY

This section summarizes previous uses of the Site and provides information regarding the source of the hazardous substances at the Site.

3.1 Past Uses and Facilities

The Site was homesteaded as early as 1850. Prior to development as a golf course in 1930, the Site was used as a hop farm. In 1930, the clubhouse and retail store buildings were constructed. Additional golf

course-related outbuildings, including maintenance and utility sheds, were constructed between 1960 and 2002. The Site operated as the Brookdale Golf Course from approximately 1931 to 2019.

3.2 Current and Future Use and Facilities

The Site is currently undergoing redevelopment. The Site is being redeveloped as a residential subdivision with single-family detached homes. As a result of the redevelopment, most of the historical structures associated with the former golf course have been demolished and removed. The former Brookdale Golf Course clubhouse will remain on-Site and repurposed as part of the redevelopment.

3.3 Zoning

According to Pierce County, the northern approximate 105 acres of the Site are classified as a Residential Resource (RR) zone. The RR zone classification indicates a density range of one to three dwelling units per net developable acre. The southern approximate 40 acres of the Site are classified as Moderate Density Single Family (MSF) zones. The MSF zone classification indicates a density range of four to six dwelling units per net developable acre. The current and planned redevelopment of the Site is consistent with these zoning classifications. The current and planned redevelopment has been approved by Pierce County and all other agencies with regulatory authority.

3.4 Transportation and Roads

Access to the Site is provided from Brookdale Road East that runs east-west along the northern Site boundary. Brookdale Road East is the single-entry point to the Site. Development of additional roads is currently ongoing at the Site.

3.5 Utilities and Water Supply

Potable water is supplied by Parkland Light and Water municipal system. There are no active water supply wells on the Property. Sewer services at the Site are provided by Pierce County. Additional water, sanitary sewer, storm sewer, gas, and electricity will be available throughout the Property after redevelopment is complete.

3.6 Potential Sources of Contamination, Identification of Release

Historical and routine golf course maintenance activities have resulted in widespread impacts to the Site soils. Soils impacted with the organochlorine pesticide dieldrin were identified during multiple environmental investigations conducted at the Site. These investigations assessed the condition of soil, sediment, groundwater, and surface water beneath the Site and characterized the nature and extent of the hazardous substances that have come to be located at the Site. Section 5.0 provides additional detail regarding the environmental investigations performed at the Site.

4.0 NATURAL CONDITIONS

4.1 Soil

Native soil material at the Site generally consists of well-graded sands and gravels (SW-GW – Unified Soil Classification System [USCS]), silts with gravel (ML-GP), and silts with sands (ML-SM). Soils vary in density and composition to a maximum explored depth of 25 feet below ground surface (bgs). Gravel and cobbles are prominent in the lower elevations of the Site and are consistent with glacial outwash and alluvial deposits.

4.2 Groundwater

Groundwater has been encountered across the Site at depths ranging from approximately 2.5 feet bgs to 16 feet bgs. The local groundwater migration direction appears to be generally westerly to southwesterly based on groundwater elevations encountered, topography, surface water flow, and regional surface water bodies.

4.3 Surface Water

As depicted on Figure 2, North Fork Clover Creek flows to the west through the northern portion of the Site. North Fork Clover Creek is situated approximately 600 feet south of the northern boundary of the Site. Clover Creek flows to the west through the central portion of the Site. Clover Creek is located approximately 2,000 feet north of the southern boundary of the Site. North Fork Clover Creek converges with Clover Creek approximately one mile west of the Site. Clover Creek ultimately discharges to Lake Steilacoom approximately 6 miles west of the Site.

4.4 Natural Resources and Ecological Receptors

The northern approximate 120 acres is located within the Pierce County Open Space Corridor. The western 450 feet of Clover Creek is in the Urban Shoreline Environment. The eastern 1,400 feet of Clover Creek is in the Rural Residential Shoreline Environment.

The potential ecological receptors of concern at the Site include vascular vegetation, soil biota, ground-feeding birds, ground-feeding small mammal predators, and herbivorous small mammals. These are categorized into the following three basic categories:

- Plants
- Soil Biota
- Wildlife

A description of the Terrestrial Ecological Evaluation (TEE), performed in accordance with WAC 173-340-7490, is provided in Section 5.4.

5.0 ENVIRONMENTAL INVESTIGATION/INTERIM ACTION SUMMARY

Between 2016 and 2021, TRC conducted a Remedial Investigation, CAP, Supplemental Remedial Investigations (SRIs), and a TEE at the Site. The Remedial Investigation is documented in the Remedial Investigation and Focused Feasibility Study (RI/FFS), dated March 18, 2019. The CAP, dated March 18, 2019, was submitted to Ecology and implemented beginning in June 2019. The SRIs were based on Ecology comments on the RI/FFS and CAP received in December 2019. TRC conducted two SRIs at the Site in 2020 and 2021.

These investigations and evaluations are summarized in the following sections.

5.1 Remedial Investigation and Focused Feasibility Study

Three initial phases of investigation were completed as part of the Remedial Investigation of the Site. Each of these phases were documented in EPI's RI/FFS, dated March 18, 2019. A summary of each of the initial phases of the Remedial Investigation is provided in the following sections.

5.1.1 Limited Pesticide Investigation – Robinson Noble (2016)

An initial limited pesticide investigation was performed by Robinson Noble in November 2016. Robinson Noble evaluated select areas for possible impacts based on historical operations. These areas were identified as locations where contaminants of potential concern (COPCs), pesticides and herbicides, were most likely to have been used.

A total of three soil samples were collected from the following locations:

- One sample was collected from beneath the pesticide spray tank located in the maintenance area;
- One sample was collected proximate to the waste oil storage area, also located in the maintenance area; and
- One sample was collected from the practice green located along the northern edge of the golf course. A map of the sample locations was not provided with the Robinson Noble Letter Report.

Samples were analyzed for the following:

- Organochlorine herbicides by U.S. Environmental Protection Agency (EPA) Method 8151 modified for herbicides; and
- Organochlorine pesticides via EPA Method 8081 for organochlorine pesticides.

The analytical results for the limited soil investigation indicated the following:

- Dieldrin was the only organochlorine pesticide detected at concentrations greater than the laboratory method detection limit.
- All three dieldrin concentrations exceeded the MTCA Method B CUL of 0.0625 milligrams per kilogram (mg/kg).
- Organochlorine herbicides were not detected in any of the samples analyzed. As a result, organochlorine herbicides were eliminated as a COPC.

A copy of the Letter Report prepared by Robinson Noble and the associated laboratory report is provided in Attachment A.

5.1.2 Focused Subsurface Investigation – EPI (2017)

Based on the results of Robinson Noble's 2016 Investigation, EPI conducted a broader Focused Subsurface Investigation (FSI) of the Property. The Robinson Noble assessment identified organochlorine pesticides in areas where they may have been mixed or formulated or released in high concentrations. However, there was no understanding of the potential presence of these compounds in areas where they may have been applied.

The objective of EPI's FSI was to assess the presence of organochlorine pesticides in soils within the tees, greens, and fairways of the golf course. Anecdotal information provided by the former Brookdale Golf Course indicated that pesticides were historically used on the greens and tees to preserve the aesthetics of the grass, but not on the fairways. Application to the fairways was avoided due to the associated expense of applying the chemicals over such a large surface area.

Soil samples were collected from 27 locations: nine tees, nine greens, and nine fairways. Sample collection depths ranged from 6 to 21 inches bgs. Samples were analyzed for organochlorine pesticides using EPA Method 8081.

As part of the FSI, EPI also assessed the potential presence of organochlorine pesticides in shallow groundwater and surface water at the Site. EPI collected two grab water samples – one surface water sample from the irrigation pond and one groundwater sample from a spigot at the on-Site well. The on-Site well was completed within the shallow aquifer and was used solely for irrigation purposes. As indicated in Section 3.5, drinking water is supplied by the local municipal supply. The grab water samples were submitted for analysis of organochlorine pesticides using EPA Method 8081.

Results of the FSI indicated that pesticide impacts were not present in shallow soils within the fairways. This finding was consistent with the anecdotal information indicating that pesticides were not used in the fairways.

Dieldrin was detected at concentrations exceeding the MTCA Method B CUL at six of the nine tees tested and at all nine of the greens. The pesticide aldrin was also detected at concentrations exceeding the MTCA Method B CUL at two tee locations and one green location. In no instance did the concentration of aldrin exceed the applicable CULs where dieldrin did not. Of the other pesticides present, none were detected in a sample where dieldrin was not detected.

Based on these findings, dieldrin was identified as the Indicator Hazardous Substance (IHS) for the Site. As a result, it was determined that analysis dieldrin across the Site would also characterize the maximum extent of those additional organochlorine compounds detected at lesser frequencies and at lesser concentrations.

Organochlorine pesticides were not detected in either the surface water sample collected from the irrigation pond or in the groundwater sample collected from the shallow on-Site well.

The full details of the FSI, including sample locations and analytical results, are documented in EPI's *Status Summary and Next Steps Technical Memorandum* (Tech Memo) dated July 5, 2018, and the RI/FFS, dated March 18, 2019.

Copies of the laboratory analytical reports from EPI's 2017 FSI are provided in Attachment B.

5.1.3 Continued Subsurface Investigation – EPI (2018)

The 2017 FSI clearly indicated the nature of pesticide impacts at the Site but did not fully characterize the lateral or vertical extents of those impacts. While 50 percent of the tees and greens had been sampled during the FSI, there were no data for the remaining tees or greens.

In 2018, EPI conducted a Continued Subsurface Investigation (CSI). The objective of the CSI was to further characterize the lateral and vertical extents of impacts in areas previously identified in the FSI and in the 50 percent of tees and greens that had not yet been investigated.

Soil samples were collected from the nine tees and nine greens not previously sampled. Additional samples were collected from those tees and greens where organochlorine pesticides were detected at concentrations in exceedance of the MTCA Method B CUL for dieldrin. Sample collection depths ranged from 6 inches to 33 inches bgs. Samples were analyzed for organochlorine pesticides using EPA Method 8081.

Analytical results indicated the depth of dieldrin impacts varied between approximately 1 foot to 2.5 feet bgs. The lateral extent of the impacts was generally localized to the tees, greens, and adjacent "fringe" grass. A more detailed documentation of the CSI, including sample locations and analytical results, can be found in EPI's Tech Memo dated July 5, 2018, and EPI's RI/FFS dated March 18, 2019.

Copies of the laboratory analytical reports from EPI's 2018 CSI are provided in Attachment B.

5.2 Cleanup Action Plan

Based on the results of the RI/FFS, TRC developed a CAP to address a total of 36 areas of interest (AOIs) at the Site. The AOIs encompassed impacted soils within the tees and greens of the former Brookdale Golf Course. The CAP was submitted to Ecology on March 18, 2019. Details regarding the implementation of the CAP are provided in Section 10.0.

5.3 Supplemental Remedial Investigations

TRC conducted two SRIs in response to Ecology opinion letters dated December 10, 2019 and August 24, 2020. TRC performed the SRI in two phases, beginning with the northern portion of the Site, north of Clover Creek. The second phase was performed in the southern portion of the Site, south of Clover Creek. These additional SRIs are described in the following sections.

5.3.1 Supplemental Remedial Investigation (North of Clover Creek) – TRC (2020)

Ecology issued an opinion letter, dated December 10, 2019, on the RI/FFS submitted on March 18, 2019. TRC performed an SRI to address the comments and concerns outlined in Ecology's opinion letter. The SRI focused on the portion of the Site north of Clover Creek (SRI – North).

For the SRI, Ecology requested additional investigation of soil, groundwater, surface water, and sediment at the Site. Ecology also requested the evaluation of the potential presence of additional analytes at the Site. These additional analytes included the following:

- Nitrates and phosphates
- Arsenic
- 1,2-Dibromoethane
- Diazinon

To evaluate soil, TRC advanced and sampled 10 soil borings with temporary wells across the Site. Soil borings were advanced to terminal depths ranging from 10 to 20 feet bgs. In addition to soil borings, TRC excavated a total of four test pits to a terminal depth of 2 feet bgs. TRC also collected surface samples from 14 AOIs where the CAP had already been implemented. Additional details regarding the implementation of the CAP are provided in Section 10.0.

All subsurface soil samples were submitted for the following analyses:

- Arsenic by EPA Method 6020
- 1,2-Dibromoethane by EPA Method 8260
- Diazinon by EPA Method 8270 Selected Ion Measurement (SIM)
- Nitrate and phosphate by EPA Method 300.0

Surface soil samples were analyzed for arsenic only.

To evaluate groundwater, TRC collected samples from the 10 soil borings completed with temporary wells. Groundwater samples were submitted for the following analyses:

- Total and dissolved arsenic by EPA Method 6020
- 1,2-Dibromoethane by EPA Method 8260
- Dieldrin by EPA Method 8081
- Diazinon by EPA Method 8270 SIM
- Nitrate and phosphate by EPA Method 300.0

To evaluate sediment, and surface water TRC collected surface water samples from North Fork Clover Creek, Clover Creek, and the irrigation pond located just south of the Clover Creek. Surface water and sediment samples were submitted for the following analyses:

- Arsenic by EPA Method 6020 (including total and dissolved arsenic for surface water)
- 1,2-Dibromoethane by EPA Method 8260
- Dieldrin by EPA Method 8081
- Diazinon by EPA Method 8270 SIM
- Nitrate and phosphate by EPA Method 300.0

The results of the SRI – North confirmed that impacts to groundwater, surface water, and sediment were not present at the Site. Arsenic was the only analyte additional detected at concentrations greater than applicable CULs in Site soils. Arsenic impacts were limited to one AOI at the Site (AOI-20). This AOI was subsequently remediated in September and October 2020. The subsequent interim remedial activities demonstrating compliance in AOI-20 were documented and submitted to Ecology in TRC's *Response to Ecology Comments*, dated, February 3, 2021.

Dieldrin was detected at a concentration that exceeded the applicable CUL in one of the reconnaissance groundwater samples, B-4:GW. To verify the reconnaissance sample result, TRC installed one monitoring well (MW-1) in the same location where B-4:GW was collected. The concentration of dieldrin did not exceed the laboratory method detection limit (MDL) in the groundwater sample collected from MW-1. Additional confirmational groundwater sampling was performed across the Site and is discussed in greater detail in Section 10.3.

The full results and findings of the SRI – North were submitted to Ecology in TRC's *Supplemental Remedial Investigation Report* (SRI North Report), dated May 29, 2020. Copies of the laboratory analytical reports from the SRI – North are provided in Attachment C.

5.3.2 Supplemental Remedial Investigation (South of Clover Creek) – TRC (2021)

Ecology issued an opinion letter, dated August 24, 2020, on the SRI North Report. TRC completed an additional SRI on the portion of the Site south of Clover Creek (SRI – South). As with the SRI – North, Ecology requested additional investigation of soil, groundwater, surface water, and sediment south of

Clover Creek at the Site. Ecology also requested the evaluation of the potential presence of additional analytes at the Site. The additional analytes are listed below:

- Nitrates and phosphates
- Arsenic
- 1,2-Dibromoethane
- Diazinon

Surface water and sediment were investigated Site-wide during the SRI – North. Those findings were presented to Ecology in TRC's *Supplemental Remedial Investigation Report*, dated, May 29, 2020. No further assessment of surface water or sediment was necessary based upon those findings.

The objective of the SRI – South then was to evaluate the potential presence of the additional analytes in soil and groundwater in the southern portion of the Site.

To evaluate soils, TRC advanced 15 soil borings and collected six surface samples across the southern portion of the Site. Soil borings were completed with temporary wells. Sample collection depths ranged from near surface to 2 feet bgs. Each soil sample was collected and submitted for the following analyses:

- Arsenic analyzed by EPA Method 6020
- 1,2-Dibromoethane analyzed by EPA Method 8260
- Diazinon analyzed by EPA Method 8270 Selected Ion Measurement (SIM)
- Nitrate and phosphate analyzed by EPA Method 300.0

To evaluate groundwater, TRC collected samples from 13 of the 15 completed temporary wells. Groundwater samples were collected and submitted for the following analyses:

- Total and dissolved arsenic analyzed by EPA Method 6020
- 1,2-Dibromoethane analyzed by EPA Method 8260
- Dieldrin analyzed by EPA Method 8081
- Diazinon analyzed by EPA Method 8270 SIM
- Nitrate and phosphate analyzed by EPA Method 300.0

The full results of SRI – South confirmed that none of the analytes listed above were detected in Site soils or groundwater at concentrations greater than applicable COCs. As a result, the additional analytes listed above were ruled out as contaminants of concern (COCs) for the Site.

The results and findings of the SRI – South were submitted to Ecology in TRC's *Supplemental Remedial Investigation Report*, dated, August 31, 2022. Copies of the laboratory analytical reports from the SRI – South are provided in Attachment D.

5.4 Terrestrial Ecological Evaluation

During the RI process, a full Terrestrial Ecological evaluation (TEE) was performed for the Site to determine if it poses a threat to the terrestrial environment. The TEE was performed in accordance with WAC 173-340-7490. The final TEE CULs for Non-Excluded Sites consist of values established in Table 749-3 and CULs provided by Ecology's TEE specialist. TEE CULs provided by Ecology's TEE specialist are included as Attachment E. Ecology has reviewed the TEE presented in the RI and the SRI and has provided no additional comment.

6.0 CONTAMINANT OCCURRENCE AND MOVEMENT

Based on evaluations of soil data as discussed in the RI/FFS, and additional data collected during the subsequent SRIs, impacts to soil are limited to dieldrin in surficial soils at the Site. Analytical data support the anecdotal information that dieldrin was applied in a lawful manner at the Site. Dieldrin impacts to soil are limited to the greens and tees where pesticides were historically applied because of the focus on the aesthetics of the grass.

One reconnaissance groundwater sample contained dieldrin at a concentration that exceeded the applicable CUL. However, dieldrin was not detected above the MDL in groundwater collected from MW-1, installed at the same location of the reconnaissance sample. Further, subsequent quarterly groundwater samples collected from MW-1 and additional monitoring wells across the Site did not contain concentrations of dieldrin greater than applicable CUL. Additional details regarding groundwater sampling performed at the Site are provided in Section 10.3.

Arsenic impacts are limited to soils located in a small, isolated area of the Site. These isolated impacts were addressed in subsequent remedial actions completed at the Site.

These findings indicate that dieldrin and arsenic are the only COCs at the Site for soil. Further, these findings demonstrate impacts to soil are relatively localized and well-constrained.

7.0 CONCEPTUAL SITE MODEL

The following conceptual site model (CSM) was developed. The CSM identifies current and potential future exposure pathways for human and ecological receptors. The CSM is presented as Attachment F and is discussed below.

- The environmental medium of concern at the Site is soil. Potential current exposure pathways include dermal and ingestion exposure by construction workers, residential/recreational users, and TEE receptors. Potential future exposure pathways to COC impacts include dermal and ingestion exposure by construction workers, residential receptors, and TEE receptors.

- The Site and surrounding land are currently zoned for residential use by Pierce County and are expected to continue as such in the future.
- Site geology consists of a mixture of well-graded sands and gravels, silts with gravel, and silts with sand.
- Groundwater has been encountered as shallow as 2.5 feet bgs, depending on Site surface elevation.
- Based upon the completed RI, Dieldrin is considered the indicator hazardous substance (IHS) and the primary COC for Site soils.
- Arsenic is a COC for a limited area of the Site (AOI-20).
- There are no COCs for Site groundwater.
- There are not, nor will be, any potential dermal or ingestion exposure pathways for soil at the Site. All dieldrin-impacted soil has been removed during implementation of the CAP. All arsenic-impacted soil has been removed during subsequent remedial action prior to redevelopment. No volatile compounds have been detected in soil at the Site. Therefore, indoor air is not a medium of concern for future buildings being constructed at the Site.

8.0 SOIL CLEANUP LEVELS

As described in the CSM, soil is the only medium of concern. CULs for soil were evaluated in accordance with MTCA. CULs take into consideration exposure pathways and receptors based on current and likely future uses of the Site. The CULs for Site COPCs are documented in Table 2, below. In each case, the lowest applicable CUL is applied to each medium or receptor.

Table 2
Established CULs

Compound	Soil ^a (mg/kg)
4,4-DDE	0.75 ^{b,c}
4,4-DDT	0.75 ^b
B-BHC	0.556
D-BHC	6 ^c
Aldrin	0.0588
Arsenic	20 ^c
1,2-Dibromoethane	0.005
Dieldrin	0.0625 ^d
Diazinon	56

Compound	Soil ^a (mg/kg)
Endosulfan I	480
Endrin	0.2
Endrin Aldehyde	NVE
Nitrate	130,000
Phosphate	NVE

Notes:

- a MTCA Method A Soil Cleanup Level (Table 740-1). Where no MTCA Method A Cleanup Level established, MTCA Method B (Cancer) Soil Cleanup Levels (from Cleanup Levels and Risk Calculations [CLARC]) used.
- b Concentration calculated from the sum of DDT, DDD, and DDE.
- c MTCA Ecological Indicator Soil Concentration protective of terrestrial receptors (WAC 173-340-900, Table 749-3)
- d MTCA Method B (Cancer) Value, which is also protective of terrestrial receptors.
- NVE No value established.

9.0 SELECTION OF CLEANUP REMEDY FOR THE PROPERTY

A cleanup action was selected for the Site based on the following conditions:

- It is consistent with Applicable or Relevant and Appropriate Requirements (ARARs);
- It satisfies the evaluation criteria of MTCA; and
- It can be implemented in conjunction with the construction of the upcoming residential development of the Site.

The selected cleanup action served as the final, permanent remedy for the Site.

Direct excavation of contaminated soils was selected as the most effective for addressing soil impacts based on the following:

- Both the depth and lateral extent of impacted soils were limited and well-delineated;
- Impacted soils were shallow and readily accessible to direct excavation; and
- Excavation was practicable, highly effective, permanent, and its effectiveness was quantifiable through performance/confirmation sampling.

As discussed in Section 5.2, a CAP dated March 18, 2019, was submitted to Ecology under separate cover. The CAP details the methodology of the selected cleanup action.

10.0 CLEANUP ACTION

As discussed in Section 5.2, a total of 36 AOIs were identified for the Site. The AOIs encompassed impacted soils within the tees and greens of the former Brookdale Golf Course. In addition to the 36 AOIs, impacted soils were identified in the maintenance compound area. Each of the 36 AOIs and the maintenance compound area were remediated prior to the redevelopment of the Property. Details regarding the methodology and findings of the implemented cleanup action are provided in the sections below.

10.1 Methodology

Between June 2019 and November 2019, EPI provided oversight for the excavation of 36 AOIs and the maintenance compound area. The excavations were completed by Ichijo's contractor, Olson Brothers Excavating (Olson), using a track-mounted excavator.

Remedial excavations varied in dimension, with depths ranging from 0.5 foot to 6 feet bgs. Excavated soils were direct loaded into trucks and transported to Hidden Hills Landfill in Puyallup, Washington, for disposal.

As described in the CAP, the excavation limits were guided by performance samples collected from excavation sidewalls or edges, and bottoms.

Samples were placed in clean, unused, laboratory-supplied containers, and labeled with pertinent sampling information. Samples were transferred to an ice-filled cooler and transported to Friedman & Bruya, Inc. in Seattle, Washington, under standard chain-of-custody procedures.

Performance samples collected from the 36 AOIs were analyzed for dieldrin using EPA Method 8081. A subset of these performance samples was also submitted for analysis of the full list of organochlorine pesticides, which includes dieldrin, using EPA Method 8081. The purpose of these data was to demonstrate that the remedial excavation of dieldrin resulted in the remediation of all other organochlorine pesticides. Blind duplicate samples (e.g., DUP-1) were collected periodically from a subset of these performance sampling locations for quality assurance and quality control (QA/QC) purposes.

Where any performance sample concentration exceeded a Site CUL, the excavation area was extended laterally and/or vertically. Performance sample concentrations less than the CULs are representative of the final limits of the excavation. As a result, these samples are considered "confirmation" samples.

Excavation was deemed completed when the IHS compound dieldrin was in compliance with the applicable CUL. For AOC-20, excavation was deemed completed when arsenic was also in compliance with the applicable CUL.

The following sections detail each of the remedial excavation areas, including the findings and analytical results.

10.2 Remedial Excavation

Remedial excavation was performed for soil at the Site in 36 AOIs and the maintenance compound area as described in the following sections. Figure 2 depicts the locations of the AOIs at the Site. Figure 3 depicts a typical cross-section of a remedial excavation.

EPI collected a total of 1,385 performance samples and 137 blind duplicate samples from the remedial excavation sidewall, edges, and bottoms. Of the 1,385 performance samples collected, 1,125 represent the final limits of the remedial excavations and are confirmation samples. Tables 3 through 38 provide a summary of all soil analytical results. Final analytical laboratory reports are contained in Attachment G.

10.2.1 AOI-1

Approximately 33 cubic yards of impacted soil were excavated and disposed from AOI-1. Figure 4, left frame depicts all performance sample locations. Figure 4, right frame depicts the locations of confirmation samples and the terminal limits of the remedial excavation.

A total of five performance samples were collected from AOI-1. Concentrations of dieldrin were less than Site CUL in all five samples. Therefore, each performance sample was considered to be a confirmation sample. One duplicate sample from AOI-1 was analyzed for quality assurance purposes. Dieldrin was not detected in the duplicate sample.

Analytical results are summarized in Table 3. Confirmation samples from AOI-1 demonstrate that AOI-1 complies with the Site CUL.

10.2.2 AOI-2

Approximately 111 cubic yards of impacted soil were excavated and disposed from AOI-2. Figure 5, left frame depicts all performance sample locations. Figure 5, right frame depicts the locations of confirmation samples and the terminal limits of the remedial excavation.

A total of 13 performance samples were collected from AOI-2. Of these, 12 were considered to be confirmation samples. One duplicate sample from AOI-2 was analyzed for quality assurance purposes. Dieldrin was not detected in the duplicate sample.

Analytical results are summarized in Table 4. Confirmation samples from AOI-2 demonstrate that AOI-2 complies with the Site CUL.

10.2.3 AOI-3

Approximately 164 cubic yards of impacted soil were excavated and disposed from AOI-3. Figure 6, left frame depicts all performance sample locations. Figure 6, right frame depicts the locations of confirmation samples and the terminal limits of the remedial excavation.

A total of 19 performance samples were collected from AOI-3. Of these, 11 were considered to be confirmation samples. One duplicate sample from AOI-3 was analyzed for dieldrin for quality assurance purposes. Dieldrin was not detected in the duplicate sample.

Analytical results are summarized in Table 5. Confirmation samples from AOI-3 demonstrating that AOI-3 complies with the Site CUL.

10.2.4 AOI-4

Approximately 1,075 cubic yards of impacted soil were excavated and disposed from AOI-4. Figure 7, left frame depicts all performance sample locations. Figure 7, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 63 performance samples were collected from AOI-4. Of these, 56 were considered to be confirmation samples. Two duplicate samples from AOI-4 were analyzed for dieldrin for quality assurance purposes. Dieldrin was not detected in the duplicate samples.

Analytical results are summarized in Table 6. Confirmation samples from AOI-4 demonstrate that AOI-4 is in complies with the Site CUL.

10.2.5 AOI-5

Approximately 570 cubic yards of impacted soil were excavated and disposed from AOI-5. Figure 8, left frame depicts all performance sample locations. Figure 8, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 35 performance samples were collected from AOI-5. Of these, 28 were considered to be confirmation samples. Six duplicate samples from AOI-5 were analyzed for dieldrin for quality assurance purposes. Dieldrin was detected in two of the duplicate samples. Of the two detections, only one exceeded the Site CUL. This exceedance occurred at a location where the excavation was later extended.

Analytical results are summarized in Table 7. Confirmation samples from AOI-5 demonstrate that AOI-5 complies with the Site CUL.

10.2.6 AOI-6

Approximately 895 cubic yards of impacted soil were excavated and disposed from AOI-6. Figure 9, left frame depicts all performance sample locations. Figure 9, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 29 performance samples were collected from AOI-6. Of these, 27 were considered to be confirmation samples. Six duplicate samples from AOI-6 were analyzed for dieldrin for quality assurance

purposes. Dieldrin was detected in two of the duplicate samples. Of the two detections, only one exceeded the Site CUL. This exceedance occurred at a location where the excavation was later extended.

Analytical results are summarized in Table 8. Confirmation samples from AOI-6 demonstrate that AOI-6 complies with the Site CUL.

10.2.7 AOI-7

Approximately 481 cubic yards of impacted soil were excavated and disposed from AOI-7. Figure 10, left frame depicts all performance sample locations. Figure 10, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 51 performance samples were collected from AOI-7. Of these, 43 were considered to be confirmation samples. Seven duplicate samples from AOI-7 were analyzed for dieldrin for quality assurance purposes. Dieldrin was detected in two duplicate samples at concentrations less than the CUL.

Analytical results are summarized in Table 9. Confirmation samples from AOI-7 demonstrate compliance with the Site CUL.

10.2.8 AOI-8

Approximately 484 cubic yards of impacted soil were excavated and disposed from AOI-8. Figure 11, left frame depicts all performance sample locations. Figure 11, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 54 performance samples were collected from AOI-8. Of these, 39 were considered to be confirmation samples. Seven duplicate samples from AOI-8 were analyzed for dieldrin for quality assurance purposes. Dieldrin was detected in two duplicate samples at concentrations that exceed the Site CUL. These exceedances occurred at locations where the excavation was later extended.

Analytical results are summarized in Table 10. Confirmation samples from AOI-8 demonstrate compliance with the Site CUL.

10.2.9 AOI-9

Approximately 16 cubic yards of impacted soil were excavated and disposed from AOI-9. Figure 12, left frame depicts all performance sample locations. Figure 12, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of five performance samples were collected from AOI-9. Concentrations of dieldrin were less than Site CUL in all five samples. . Therefore, each performance sample was also considered to be a confirmation sample.

Analytical results are summarized in Table 11. Confirmation samples from AOI-9 demonstrate AOI-9 complies with the Site CUL.

10.2.10 AOI-10

Approximately 425 cubic yards of impacted soil was excavated and disposed from AOI-10. Figure 13, left frame depicts all performance sample locations. Figure 13, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 33 performance samples were collected from AOI-10. Of these, 30 were considered to be confirmation samples. Four duplicate samples from AOI-10 were analyzed for dieldrin for quality assurance purposes. Dieldrin was not detected in any of the duplicate samples.

Analytical results are summarized in Table 12. Confirmation samples from AOI-10 demonstrate AOI-10 complies with the Site CUL.

10.2.11 AOI-11

Approximately 909 cubic yards of impacted soil were excavated and disposed from AOI-11. Figure 14, left frame depicts all performance sample locations. Figure 14, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 80 performance samples were collected from AOI-11. Of these, 56 were considered to be confirmation samples. Six duplicate samples from AOI-11 were analyzed for dieldrin for quality assurance purposes. Dieldrin was detected in three of the duplicate samples. Of the three detections, two exceeded the Site CUL. These exceedances occurred at locations where the excavation was later extended.

Analytical results are summarized in Table 13. Confirmation samples from AOI-11 demonstrate AOI-11 complies with the Site CUL.

10.2.12 AOI-12

Approximately 738 cubic yards of impacted soil were excavated and disposed from AOI-12. Figure 15, left frame depicts all performance sample locations. Figure 15, right frame depicts the confirmation samples and the terminal limits of the remedial excavation.

A total of 34 performance samples were collected from AOI-12 were analyzed for dieldrin. Of these, 31 were considered to be confirmation samples. Four duplicate samples from AOI-12 were analyzed for dieldrin for quality assurance purposes. Dieldrin was detected in two of the duplicate samples at concentrations less than the Site CUL.

Analytical results are summarized in Table 14. Confirmation samples from AOI-12 demonstrate that AOI-12 complies with the Site CUL.

10.2.13 AOI-13

Approximately 263 cubic yards of impacted soil was excavated and disposed from AOI-13. Figure 16, left frame depicts all performance sample locations. Figure 16, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 28 performance samples were collected from AOI-13. Of these, 25 were considered to be confirmation samples. Three duplicate samples from AOI-13 were analyzed for dieldrin for quality assurance purposes. Dieldrin was detected in one duplicate sample at concentrations that exceeded the Site CUL. This exceedance occurred at a location where the excavation was later extended.

Analytical results are summarized in Table 15. Confirmation samples from AOI-13 demonstrate that AOI-13 complies with the Site CUL.

10.2.14 AOI-14

Approximately 709 cubic yards of impacted soil were excavated and disposed from AOI-14. Figure 17, left frame depicts all performance sample locations. Figure 17, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 52 performance samples were collected from AOI-14. Of these, 44 were considered to be confirmation samples. Four duplicate samples from AOI-14 were analyzed for dieldrin for quality assurance purposes. Dieldrin was detected in all four duplicate samples. Of the detections, dieldrin was exceeded the Site CUL in two duplicate samples. These exceedances occurred at locations where the excavation was later extended.

Analytical results are summarized in Table 16. Confirmation samples from AOI-14 demonstrate that AOI-14 complies with the Site CUL.

10.2.15 AOI-15

Approximately 587 cubic yards of impacted soil were excavated and disposed from AOI-15. Figure 18, left frame depicts all performance sample locations. Figure 18, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 50 performance samples were collected from AOI-15. Of these, 41 were considered to be confirmation samples. Four duplicate samples from AOI-15 were analyzed for dieldrin for quality assurance purposes. Dieldrin was detected in just one duplicate sample, at a concentration that exceeded the Site CUL. This exceedance occurred at a location where the excavation was later extended.

Analytical results are summarized in Table 17. Confirmation samples from AOI-15 demonstrate that AOI-15 complies with the Site CUL.

10.2.16 AOI-16

Approximately 353 cubic yards of impacted soil were excavated and disposed from AOI-16. Figure 19, left frame depicts all performance sample locations. Figure 19, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 43 performance samples were collected from AOI-16. Of these, 35 were considered to be confirmation samples. Two duplicate samples from AOI-16 were analyzed for dieldrin for quality assurance purposes. Dieldrin was detected in just one of the duplicate samples at a concentration less than the Site CUL.

Analytical results are summarized in Table 18. Confirmation samples from AOI-16 demonstrate that AOI-16 complies with the Site CUL.

10.2.17 AOI-17

Approximately 437 cubic yards of impacted soil were excavated and disposed from AOI-17. Figure 20, left frame depicts all performance sample locations. Figure 20, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 30 performance samples were collected from AOI-17. Of these, 26 were considered to be confirmation samples. Four duplicate samples from AOI-17 were analyzed for dieldrin for quality assurance purposes. Dieldrin was not detected in the duplicate samples.

Analytical results are summarized in Table 19. Confirmation samples from AOI-17 demonstrate that AOI-17 complies with the Site CUL.

10.2.18 AOI-18

Approximately 592 cubic yards of impacted soil were excavated and disposed from AOI-18. Figure 21, left frame depicts all performance sample locations. Figure 21, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 40 performance samples were collected from AOI-18 were analyzed for dieldrin. Of these, 34 were considered to be confirmation samples. Three duplicate samples from AOI-18 were analyzed for dieldrin for quality assurance purposes. Dieldrin was not detected in the duplicate samples.

Analytical results are summarized in Table 20. Confirmation samples from AOI-18 demonstrate that AOI-18 complies with the Site CUL.

10.2.19 AOI-19

Approximately 285 cubic yards of impacted soil were excavated and disposed from AOI-19. Figure 22, left frame depicts all performance sample locations. Figure 22, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 28 performance samples were collected from AOI-19. Of these, 22 were considered to be confirmation samples. Three duplicate samples from AOI-19 were analyzed for dieldrin for quality assurance purposes. Dieldrin was detected in just one of the duplicate samples at a concentration that exceeded the Site CUL. This exceedance occurred at a location where the excavation was later extended.

Analytical results are summarized in Table 21. Confirmation samples from AOI-19 demonstrate that AOI-19 complies with the Site CUL.

10.2.20 AOI-20

Approximately 635 cubic yards of impacted soil were excavated and disposed from AOI-20. Figure 23, left frame depicts all performance sample locations. Figure 23, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 48 performance samples were collected from AOI-20. Of these, 39 were considered to be confirmation samples. Six duplicate samples from AOI-20 were analyzed for dieldrin for quality assurance purposes. Dieldrin was detected in just one of the duplicate samples at a concentration less than the Site CUL.

Analytical results are summarized in Table 22. Confirmation samples from AOI-20 demonstrate that AOI-20 complies with the Site CUL.

10.2.21 AOI-21

Approximately 445 cubic yards of impacted soil were excavated and disposed from AOI-21. Figure 24, left depicts the locations of all performance samples collected. Figure 24, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 32 performance samples were collected from AOI-21. Of these, 28 were considered to be confirmation samples. Three duplicate samples were also collected from AOI-21 for quality assurance purposes. Dieldrin was not detected in the duplicate samples.

Analytical results are summarized in Table 23. Confirmation samples from AOI-21 demonstrate that AOI-21 complies with the MTCA CUL.

10.2.22 AOI-22

Approximately 379 cubic yards of impacted soil were excavated and disposed from AOI-22. Figure 25, left frame depicts all performance sample locations. Figure 25, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 32 performance samples were collected from AOI-22. Of these, 28 were considered to be confirmation samples. Three duplicate samples from AOI-22 were collected and analyzed for quality assurance purposes. Dieldrin was not detected in the duplicate samples.

Analytical results are summarized in Table 24. Confirmation samples from AOI-22 demonstrate that AOI-22 complies with the Site CUL.

10.2.23 AOI-23

Approximately 885 cubic yards of impacted soil were excavated and disposed from AOI-23. Figure 26, left frame depicts all performance sample locations. Figure 26, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 84 performance samples were collected and analyzed from AOI-23. Of these, 64 were considered to be confirmation samples. Seven duplicate samples from AOI-23 were analyzed for laboratory quality assurance purposes. Dieldrin was detected in three of the duplicate samples. Of the three detections, two exceeded the Site CUL. These exceedances occurred at locations where the excavation was later extended.

Analytical results are summarized in Table 25. Confirmation samples from AOI-23 demonstrate that AOI-23 complies with the Site CUL.

10.2.24 AOI-24

Approximately 357 cubic yards of impacted soil were excavated and disposed from AOI-24. Figure 27, left frame depicts all performance sample locations. Figure 27, right frame depicts the locations of all confirmation samples and the terminal limits of the remedial excavation.

A total of 25 performance samples from AOI-24 were analyzed for dieldrin. Of these, 21 were considered to be confirmation samples. One duplicate sample from AOI-24 was analyzed for dieldrin for laboratory quality assurance purposes. Dieldrin was not detected in the duplicate sample.

Analytical results are summarized in Table 26. Confirmation samples from AOI-24 demonstrate that AOI-24 complies with the Site CUL.

10.2.25 AOI-25

Approximately 732 cubic yards of impacted soil were excavated and disposed from AOI-25. Figure 28, left frame depicts all performance sample locations. Figure 28, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 57 performance samples from AOI-25 were analyzed for dieldrin. Of these, 46 were considered to be confirmation samples. Seven duplicate samples were analyzed for dieldrin for laboratory quality assurance purposes. Dieldrin was detected in four of the duplicate samples. Of the four detections, one exceeded the Site CUL. This exceedance occurred at a location where the excavation was later extended.

Analytical results are summarized in Table 27. Confirmation samples from AOI-25 demonstrate that AOI-25 complies with the Site CUL.

10.2.26 AOI-26

Approximately 515 cubic yards of impacted soil were excavated and disposed from AOI-26. Figure 29, left frame depicts all performance sample locations. Figure 29, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 62 performance samples from AOI-26 were analyzed for dieldrin. Of these, 48 were considered to be confirmation samples. Five duplicate samples were analyzed for dieldrin for laboratory quality assurance purposes. Dieldrin was detected in just one of the duplicate samples at a concentration less than the Site CUL.

Analytical results are summarized in Table 28. Confirmation samples from AOI-26 demonstrate that AOI-26 complies with the Site CUL.

10.2.27 AOI-27

Approximately 1,274 cubic yards of impacted soil were excavated and disposed from AOI-27. Figure 30, left frame depicts all performance sample locations. Figure 30, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 96 performance samples from AOI-27 were analyzed for dieldrin. Of these, 70 were considered to be confirmation samples. Eleven duplicate samples from AOI-27 were analyzed for dieldrin for laboratory quality assurance purposes. Dieldrin was detected in four of the duplicate samples. Of the four detections, one exceeded the Site CUL. This exceedance occurred at a location where the excavation was later extended.

Analytical results are summarized in Table 29. Confirmation samples from AOI-27 demonstrate that AOI-27 complies with the Site CUL.

10.2.28 AOI-28

Approximately 90 cubic yards of impacted soil were excavated and disposed from AOI-28. Figure 31, left frame depicts all performance sample locations. Figure 31, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 13 performance samples from AOI-28 were analyzed for dieldrin. Of these, nine were considered to be confirmation samples. Two duplicate samples were analyzed for dieldrin for laboratory quality assurance purposes. Dieldrin was detected in just one duplicate sample at a concentration less than the Site CUL.

Analytical results are summarized in Table 30. Confirmation samples from AOI-28 demonstrate that AOI-28 complies with the Site CUL.

10.2.29 AOI-29

Approximately 29 cubic yards of impacted soil were excavated and disposed from AOI-29. Figure 32, left frame depicts all performance sample locations. Figure 32, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of five performance samples were analyzed for dieldrin. Concentrations of dieldrin were less than the Site CUL in all five samples. Therefore, each performance sample is considered to be a confirmation sample.

Analytical results are summarized in Table 31. Confirmation samples from AOI-29 demonstrate that AOI-29 complies with the Site CUL.

10.2.30 AOI-30

Approximately 701 cubic yards of impacted soil were excavated and disposed from AOI-30. Figure 33, left frame depicts all performance sample locations. Figure 33, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 44 performance samples were analyzed for dieldrin. Of these, 36 were considered to be confirmation samples. Four duplicate samples were analyzed for dieldrin for laboratory quality assurance purposes. Dieldrin was detected in three of the duplicate samples. Of the three detections, one exceeded the Site CUL. This exceedance occurred at a location where the excavation was later extended.

Analytical results are summarized in Table 32. Confirmation samples from AOI-30 demonstrate that AOI-30 complies with the Site CUL.

10.2.31 AOI-31

Approximately 133 cubic yards of impacted soil were excavated and disposed from AOI-31. Figure 34, left frame depicts all performance sample locations. Figure 34, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 11 performance samples were analyzed for dieldrin. Concentrations of dieldrin were less than the Site CUL in all 11 samples. Therefore, each performance sample is also considered to be a confirmation sample. One duplicate sample was analyzed for dieldrin for laboratory quality assurance purposes. Dieldrin was not detected in the duplicate sample.

Analytical results are summarized in Table 33. Confirmation samples from AOI-31 demonstrate that AOI-31 complies with the Site CUL.

10.2.32 AOI-32

Approximately 636 cubic yards of impacted soil were excavated and disposed from AOI-32. Figure 35, left frame depicts all performance sample locations. Figure 35, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 29 performance samples were analyzed for dieldrin. Of these, 26 were considered to be confirmation samples. Four duplicate samples were analyzed for dieldrin for laboratory quality assurance purposes. Dieldrin was detected in just one duplicate sample at a concentration less than the Site CUL.

Analytical results are summarized in Table 34. Confirmation samples from AOI-32 demonstrate that AOI-32 complies with the Site CUL.

10.2.33 AOI-33

Approximately 603 cubic yards of impacted soil were excavated and disposed from AOI-33. Figure 36, left frame depicts all performance sample locations. Figure 36, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 44 performance samples were analyzed for dieldrin. Of these, 37 were considered to be confirmation samples. Four duplicate samples were analyzed for dieldrin for laboratory quality assurance purposes. Dieldrin was not detected in the duplicate samples.

Analytical results are summarized in Table 35. Confirmation samples from AOI-33 demonstrate that AOI-33 complies with the Site CUL.

10.2.34 AOI-34

Approximately 96 cubic yards of impacted soil were excavated and disposed from AOI-34. Figure 37, left frame depicts all performance sample locations. Figure 37, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 29 performance samples were analyzed for dieldrin. Of these, 20 were considered to be confirmation samples. Two duplicate samples from AOI-34 were analyzed for dieldrin for laboratory quality assurance purposes. Dieldrin was detected in just one duplicate sample at a concentration less than the Site CUL.

Analytical results are summarized in Table 36. Confirmation samples from AOI-34 demonstrate that AOI-34 complies with the Site CUL.

10.2.35 AOI-35

Approximately 631 cubic yards of impacted soil were excavated and disposed from AOI-35. Figure 38, left frame depicts all performance sample locations. Figure 38, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 46 performance samples from AOI-35 were analyzed for dieldrin. Of these, 35 were considered to be confirmation samples. Five duplicate samples were analyzed for dieldrin for laboratory quality assurance purposes. Dieldrin was detected in three of the duplicate samples. Of the three detections, two exceeded the Site CUL. These exceedances occurred at locations where the excavation was later extended.

Analytical results are summarized in Table 37. Confirmation samples from AOI-35 demonstrate that AOI-35 complies with the Site CUL.

10.2.36 AOI-36

Approximately 173 cubic yards of impacted soil were excavated and disposed from AOI-36. Figure 39, left frame depicts all performance sample locations. Figure 39, right frame depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 26 performance samples were analyzed for dieldrin. Of these, 22 were considered to be confirmation samples. Two duplicate samples were analyzed for dieldrin for laboratory quality assurance purposes. Dieldrin was detected at concentrations less than the Site CUL in both duplicate samples.

Analytical results are summarized in Table 38. Confirmation samples from AOI-36 demonstrate that AOI-36 complies with the Site CUL.

10.2.37 Maintenance Compound Area

During the course of the implementation of the CAP, EPI observed what appeared to be petroleum-impacted surface soils at the Site. These impacts were limited to the maintenance compound area of the Site. EPI collected two surface soil samples from the stained locations around the maintenance compound area for waste characterization purposes. These samples were submitted for analysis according to the requirements outlined in MTCA Table 830-1, "Required Testing for Petroleum Releases."

Four additional surface soil samples were collected from around the shed within the maintenance compound area. These samples were submitted for organochlorine pesticides analysis by EPA Method 8081.

Analytical results from the waste characterization samples indicated that gasoline-range organics (GRO), diesel-range organics (DRO), and oil-range organics (ORO) were detected at concentrations that exceeded MTCA Method A Soil CULs for Unrestricted Land Uses (MTCA Method A Soil CULs) in both waste characterization samples. No other compounds were detected at concentrations exceeding applicable CULs.

Analytical results from the samples collected around the shed within the maintenance compound area indicated one sample contained a concentration of dieldrin at concentrations greater than the selected CUL.

Approximately 73 cubic yards of impacted soil were subsequently excavated and disposed from the maintenance compound area. Figure 40, left frame, depicts all performance sample locations. Figure 40, right frame, depicts the confirmation sample locations and the terminal limits of the remedial excavation.

A total of 10 performance samples were collected from the maintenance compound area. Of these, five were analyzed for dieldrin by EPA Method 8081, and DRO and ORO by Northwest Total Petroleum Hydrocarbons by Diesel Extended (NWTPH-Dx). Five additional performance samples were analyzed for GRO by NWPTH as Gasoline Extended (NWTPH-Gx), and DRO and ORO by NWTPH-Dx.

Dieldrin results were compared against the Site CUL. Petroleum results were compared against the following MTCA Method A Soil CULs:

- GRO – 100 mg/kg
- DRO – 2,000 mg/kg
- ORO – 2,000 mg/kg

Analytical results are summarized in Table 39. All 10 performance samples were considered to be confirmation samples. Confirmation samples from the maintenance compound area demonstrate that the maintenance compound area complies with the Site CUL for dieldrin and the applicable MTCA CULs for GRO, DRO, and ORO.

10.3 Groundwater

As described in Section 5.3.1, dieldrin was detected in one reconnaissance groundwater sample (B-4:GW) at a concentration that exceeded the applicable CUL. This sample was collected from AOI-11 as part of the SRI – North.

TRC installed monitoring well MW-1 in February 2020 at the same location B-4:GW was collected. The purpose of MW-1 was to further assess groundwater conditions at soil boring B-4 after initial analysis contained dieldrin. One groundwater sample was collected from MW-1 and analyzed for dieldrin. The dieldrin concentration did not exceed the MDL of 0.02 µg/L.

Per Ecology's request, TRC installed a series of four monitoring wells proximate to MW-1 (MW-2, MW-3, MW-4, and MW-5) in March 2021 to monitor groundwater conditions. Monitoring well construction logs are provided in Attachment H.

Groundwater from the monitoring wells was sampled on a quarterly basis between March 2021 and September 2021. Samples were submitted to Friedman & Bruya, Inc. in Seattle, Washington, for analysis of dieldrin by EPA Method 8081.

The MDL for dieldrin was greater than the MTCA Method B Groundwater CUL (0.0055 µg/L). As a result, the Site CUL for groundwater is equivalent to the MDL (WAC 173-340-707). Dieldrin concentrations were less than the MDL in all quarterly groundwater samples from all monitoring wells. As a result, the data demonstrate that groundwater concentrations at AOI-11 comply with the Site CUL.

Analytical results are summarized in Table 40. Final analytical laboratory reports are contained in Attachment I.

10.4 Waste Disposal

A total of 29,043 tons of dieldrin-impacted soil was directly loaded into trucks by Olson and transported to the Hidden Hills Landfill in Puyallup, Washington. Soils were disposed of as non-hazardous. Copies of the disposal documents are provided in Attachment J.

11.0 CONCLUSIONS

The following conclusions are supported by the results of the completed cleanup action:

- The nature and extent of Site COCs were fully characterized through environmental investigations and additional sampling conducted during the cleanup action.
- The apparent source of dieldrin in Site soils resulted from historical and routine golf course maintenance activities. These activities included the application of pesticide compounds to

the tees and greens of the former Brookdale Golf Course. These compounds were applied in a lawful manner consistent with their intended purpose and use.

- The dieldrin source areas in soil at all AOI's were fully removed during the remedial excavation and the MTCA Method B Soil CUL was attained throughout the Site.
- Analytical data from QA/QC samples demonstrate that the remedial excavation of dieldrin resulted in the remediation of all other organochlorine pesticides. In no instance was an organochlorine pesticide compound detected where dieldrin was not.
- Arsenic impacts identified at the Site were isolated to soils located in AOI-20. Arsenic impacts in AOI-20 were fully removed during subsequent remedial activities completed at the Site.
- The apparent source of petroleum in Site soils resulted from routine mechanical maintenance performed in and around the maintenance compound area.
- Three consecutive quarterly groundwater monitoring events have demonstrated compliance with the MTCA Method B CUL for dieldrin at AOI-11.
- No further remedial action is necessary at the Site.

12.0 LIMITATIONS

To the extent that preparation of this CAR has required the application of best professional judgment and the application of established scientific and engineering principles, certain results of this work were based on subjective interpretation. TRC makes no warranties, express or implied, including and without limitation warranties as to merchantability or fitness for a particular purpose. The information provided in this report is not to be construed as legal advice.

This CAR was prepared solely for Ichijo and the contents herein may not be used or relied upon by any other person without the express written consent and authorization of TRC.

Tables

Table 3
Soil Analytical Data: AOI-1
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-1-B-1:1	1	7/10/2019	<0.01
AOI-1-SW-1:0.5	0.5	7/10/2019	0.012
AOI-1-SW-2:0.5	0.5	7/10/2019	<0.01
AOI-1-SW-2:0.5 DUP-73	0.5	7/10/2019	<0.01
AOI-1-SW-3:0.5	0.5	7/10/2019	<0.01
AOI-1-SW-4:0.5	0.5	7/10/2019	0.03
MTCA Method B Soil Cleanup Level^b			0.0625

Notes:

All results presented in milligrams per kilogram (mg/kg).

Bold Bold results exceed the laboratory reporting limit.

AOI Area of Interest.

B Bottom.

SW Sidewall.

a Analyzed by EPA Method 8081B.

b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.


Table 4
Soil Analytical Data: AOI-2
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-2-B-1:2	2	6/13/2019	<0.01
AOI-2-B-2:2	2	6/13/2019	<0.01
AOI-2-B-3:2.5	2.5	6/13/2019	<0.01
AOI-2-B-4:3	3	6/13/2019	<0.01
AOI-2-B-5:2	2	8/12/2019	0.011
AOI-2-E-2:0.5	0.5	6/13/2019	<0.01
AOI-2-E-4:0.5	0.5	6/13/2019	0.014
AOI-2-SW-1:1	1	6/13/2019	<0.01
AOI-2-SW-3:1	1	6/13/2019	<0.01
AOI-2-SW-5:1	1	6/13/2019	0.11
AOI-2-SW-6:1	1	8/12/2019	<0.01
AOI-2-SW-7:1	1	8/12/2019	<0.01
AOI-2-SW-8:1.5	1.5	8/12/2019	<0.01
AOI-2-SW-8:1.5 Dup-77	1.5	8/12/2019	<0.01
MTCA Method B Soil Cleanup Level^b			0.0625

Notes:

All results presented in milligrams per kilogram (mg/kg).

Bold Bold results exceed the laboratory reporting limit.

 Shaded results exceed the cleanup level.

AOI Area of Interest.

B Bottom.

E Edge

SW Sidewall.

a Analyzed by EPA Method 8081B.

b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.


Table 5
Soil Analytical Data: AOI-3
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-3-B-1:1.6	6	8/12/2019	0.39
AOI-3-B-1:2.6	6	8/12/2019	0.11
AOI-3-B-2:3	3	10/2/2019	<0.01
AOI-3-B-3:2	2	10/2/2019	0.019
AOI-3-B-4:3	3	11/1/2019	<0.01
AOI-3-B-5:3	3	11/1/2019	<0.01
AOI-3-B-5:3 Dup-136	3	11/1/2019	<0.01
AOI-3-B-6:0.25	0.25	11/1/2019	<0.01
AOI-3-SW-1:1.8	1.8	8/12/2019	0.24
AOI-3-SW-2:0.5	0.5	8/12/2019	0.011
AOI-3-SW-3:0.5	0.5	8/12/2019	1.9
AOI-3-SW-4:0.5	0.5	8/12/2019	0.84
AOI-3-SW-4:0.5	0.5	10/2/2019	0.093
AOI-3-SW-5:0.5	0.5	10/2/2019	0.021
AOI-3-SW-6:1	1	10/2/2019	3.8
AOI-3-SW-7:1	1	10/2/2019	8.0
AOI-3-SW-8:1	1	10/2/2019	5.3
AOI-3-SW-9:0.5	1	11/1/2019	<0.01
AOI-3-SW-10:1	1	11/1/2019	<0.01
AOI-3-SW-11:1	1	11/1/2019	0.019
MTCA Method B Soil Cleanup Level^b			0.0625

Notes:

All results presented in milligrams per kilogram (mg/kg).

Bold Bold results exceed the laboratory reporting limit.

 Shaded results exceed the cleanup level.

AOI Area of Interest.

B Bottom.

E Edge

SW Sidewall.

a Analyzed by EPA Method 8081B.

b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 6
Soil Analytical Data: AOI-4
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-4-B-1:2	2	6/13/2019	<0.01
AOI-4-B-2:2	2	6/13/2019	0.016
AOI-4-B-3:2	2	6/13/2019	0.067 d
AOI-4-B-3:3	3	6/13/2019	<0.01
AOI-4-B-4:2	2	6/13/2019	<0.01
AOI-4-B-5:2	2	6/13/2019	<0.01
AOI-4-B-6:2	2	6/13/2019	<0.01
AOI-4-B-7:4	4	6/13/2019	<0.01
AOI-4-B-8:2.5	2.5	6/13/2019	<0.01
AOI-4-B-9:2	2	6/13/2019	<0.01
AOI-4-B-10:2	2	6/13/2019	<0.01
AOI-4-B-11:2	2	6/13/2019	0.024
AOI-4-B-12:1.5	1.5	6/13/2019	<0.01
AOI-4-B-13:13.5	3.5	6/13/2019	<0.01
AOI-4-B-14:2.5	2.5	6/13/2019	0.089
AOI-4-B-14:3.5	3.5	6/13/2019	0.015
AOI-4-B-15:0.8	0.8	6/14/2019	0.032
AOI-4-B-16:1	1	6/14/2019	0.037
AOI-4-B-17:2	2	6/14/2019	<0.01
AOI-4-B-18:0.8	0.8	6/14/2019	<0.01
AOI-4-B-19:2	2	6/14/2019	<0.01
AOI-4-B-20:1.0	1	6/14/2019	<0.01
AOI-4-B-21:0.5	0.5	6/14/2019	0.054
AOI-4-B-22:0.8	0.8	6/14/2019	<0.01
AOI-4-B-23:2	2	8/12/2019	<0.01
AOI-4-B-23:2 Dup-78	2	8/12/2019	<0.01
AOI-4-B-24:2	2	8/12/2019	0.14
AOI-4-B-24:3.5	3.5	10/2/2019	<0.01
AOI-4-B-25:1.5	1.5	8/14/2019	0.011
AOI-4-B-30:2	2	8/12/2019	<0.01
AOI-4-E-0.5	0.5	6/13/2019	3.1
AOI-4-E-12:0.3	0.3	6/13/2019	<0.01
AOI-4-E-6:0.5	0.5	6/13/2019	0.4
AOI-4-SW-1:1.5	1.5	6/13/2019	<0.01
AOI-4-SW-2:2	2	6/13/2019	0.02
AOI-4-SW-3:2	2	6/13/2019	5.2 d
AOI-4-SW-4:1	1	6/13/2019	<0.01
AOI-4-SW-7:1	1	6/13/2019	<0.01
AOI-4-SW-8:0.8	0.8	6/13/2019	<0.01
AOI-4-SW-8:0.8 DUP-1	0.8	6/13/2019	<0.01
AOI-4-SW-9:0.5	0.5	6/13/2019	<0.01
AOI-4-SW-10:1	1	6/13/2019	<0.01
AOI-4-SW-11:0.5	0.5	6/13/2019	0.012
AOI-4-SW-13:0.9	0.9	6/14/2019	<0.01
AOI-4-SW-14:1	1	8/12/2019	<0.01
AOI-4-SW-14:1.0	1	6/14/2019	0.094
AOI-4-SW-15:3	3	8/12/2019	<0.01
AOI-4-SW-16:1	1	8/12/2019	<0.01
AOI-4-SW-17:1	1	8/12/2019	0.056
AOI-4-SW-18:0.5	0.5	8/12/2019	<0.01
AOI-4-SW-19:1	1	8/12/2019	<0.01
AOI-4-SW-20:1	1	8/12/2019	<0.01
AOI-4-SW-21:0.8	0.8	8/12/2019	<0.01
AOI-4-SW-22:2.5	2.5	8/12/2019	<0.01
AOI-4-SW-23:2.5	2.5	8/12/2019	<0.01
AOI-4-SW-24:2.5	2.5	8/12/2019	<0.01
AOI-4-SW-25:2.5	2.5	8/12/2019	0.024
AOI-4-SW-26:3	3	8/12/2019	<0.01
AOI-4-SW-27:3	3	8/12/2019	0.015
AOI-4-SW-28:3	3	8/12/2019	<0.01
AOI-4-SW-29:3	3	8/12/2019	<0.01
AOI-4-SW-30:1.5	1.5	8/14/2019	0.022
AOI-4-SW-31:0.9	0.9	8/14/2019	<0.01
AOI-4-SW-32:0.9	0.9	8/14/2019	<0.01
AOI-4-SW-33:0.5	0.5	8/19/2019	<0.01
MTCA Method B Soil Cleanup Level ^b			0.0625

Notes:
All results presented in milligrams per kilogram (mg/kg).
Bold Bold results exceed the laboratory reporting limit.
 Shaded results exceed the cleanup level.
AOI Area of Interest.
SW Sidewall.
B Bottom.
E Edge
a Analyzed by EPA Method 8081B.
b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Qualifier:
d The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

Table 7
Soil Analytical Data: AOI-5
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-5-B-1:1.5	1.5	6/14/2019	<0.01
AOI-5-B-10:2	2	8/12/2019	<0.01
AOI-5-B-11:2.5	2.5	10/2/2019	<0.01
AOI-5-B-12:2.5	2.5	10/2/2019	<0.01
AOI-5-B-12:2.5 DUP-132	2.5	10/2/2019	<0.01
AOI-5-B-13:2.5	2.5	10/2/2019	0.024
AOI-5-B-14:2.5	2.5	10/31/2019	<0.01
AOI-5-B-2:1.5	1.5	6/14/2019	0.034
AOI-5-B-2:1.5 DUP-3	1.5	6/14/2019	0.032
AOI-5-B-2:2.5	2.5	6/14/2019	0.010
AOI-5-B-3:2	2	6/14/2019	<0.01
AOI-5-B-4:2	2	6/14/2019	0.014
AOI-5-B-5:2	2	6/14/2019	<0.01
AOI-5-B-5:2 DUP-2	2	6/14/2019	<0.01
AOI-5-B-6:1	1	6/14/2019	<0.01
AOI-5-B-7:1	1	6/14/2019	<0.01
AOI-5-B-8:2	2	8/12/2019	<0.01
AOI-5-B-9:3	3	8/12/2019	0.013
AOI-5-SW-1:1	1	6/17/2019	1.4
AOI-5-SW-10:1.5	1.5	8/21/2019	2
AOI-5-SW-11:1.5	1.5	8/12/2019	<0.01
AOI-5-SW-11:1.5 Dup-79	1.5	8/12/2019	<0.01
AOI-5-SW-12:1	1	8/21/2019	<0.01
AOI-5-SW-13:0.8	0.8	8/12/2019	<0.01
AOI-5-SW-14:1	1	10/2/2019	<0.01
AOI-5-SW-15:1	1	10/2/2019	<0.01
AOI-5-SW-16:1	1	10/2/2019	<0.01
AOI-5-SW-17:1	1	10/2/2019	<0.01
AOI-5-SW-18:1	1	10/2/2019	0.076
AOI-5-SW-18:1 DUP-133	1	10/2/2019	<0.01
AOI-5-SW-19:1	1	10/31/2019	<0.01
AOI-5-SW-2:0.9	0.9	6/17/2019	1.2
AOI-5-SW-20:1	1	10/31/2019	<0.01
AOI-5-SW-3:1	1	6/17/2019	0.022
AOI-5-SW-4:1.7	1.7	6/17/2019	0.94
AOI-5-SW-4:1.7 DUP-4	1.7	6/17/2019	0.84
AOI-5-SW-5:0.5	0.5	6/17/2019	<0.01
AOI-5-SW-6:0.5	0.5	8/12/2019	0.019
AOI-5-SW-7:1	1	8/12/2019	0.034
AOI-5-SW-8:1	1	8/12/2019	0.074
AOI-5-SW-9:1	1	8/12/2019	0.17
MTCA Method B Soil Cleanup Level^b			0.0625

Notes:

All results presented in milligrams per kilogram (mg/kg).

Bold Bold results exceed the laboratory reporting limit.

Shaded Shaded results exceed the cleanup level.

AOI Area of Interest.

B Bottom.

SW Sidewall.

a Analyzed by EPA Method 8081B.

b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.


Table 8
Soil Analytical Data: AOI-6
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-6-B-1:1.7	1.7	6/17/2019	0.015
AOI-6-B-10:2	2	6/17/2019	<0.01
AOI-6-B-11:2.2	2.2	6/17/2019	0.034
AOI-6-B-12:2.5	2.5	6/17/2019	0.014
AOI-6-B-12:2.5 DUP-8	2.5	6/17/2019	0.022
AOI-6-B-13:3	3	6/17/2019	<0.01
AOI-6-B-14:2.5	2.5	6/17/2019	<0.01
AOI-6-B-14:2.5 DUP-6	2.5	6/17/2019	<0.01
AOI-6-B-15:2	2	6/17/2019	0.31
AOI-6-B-15:2 DUP-5	2	6/17/2019	0.2
AOI-6-B-15:3	3	6/17/2019	0.48
AOI-6-B-16:1.5	1.5	6/17/2019	<0.01
AOI-6-B-17:4	4	8/12/2019	<0.01
AOI-6-B-18:4	4	8/12/2019	<0.01
AOI-6-B-18:4 Dup-80	4	8/12/2019	<0.01
AOI-6-B-2:1.4	1.4	6/17/2019	<0.01
AOI-6-B-3:1	1	6/17/2019	0.023
AOI-6-B-4:1	1	6/17/2019	0.033
AOI-6-B-5:1	1	6/17/2019	<0.01
AOI-6-B-6:3	3	6/17/2019	0.012
AOI-6-B-7:3	3	6/17/2019	<0.01
AOI-6-B-7:3 DUP-7	3	6/17/2019	0.018
AOI-6-B-8:3	3	6/17/2019	0.013
AOI-6-B-9:3	3	6/17/2019	<0.01
AOI-6-SW-1:1	1	6/18/2019	<0.01
AOI-6-SW-10:3	3	8/12/2019	<0.01
AOI-6-SW-2:0.8	0.8	6/18/2019	<0.01
AOI-6-SW-3:0.9	0.9	6/18/2019	<0.01
AOI-6-SW-4:1.7	1.7	6/18/2019	<0.01
AOI-6-SW-4:1.7 DUP-9	1.7	6/18/2019	<0.01
AOI-6-SW-5:1	1	6/18/2019	0.011
AOI-6-SW-6:2	2	6/18/2019	<0.01
AOI-6-SW-7:1	1	6/18/2019	<0.01
AOI-6-SW-8:3	3	8/12/2019	<0.01
AOI-6-SW-9:3	3	8/12/2019	<0.01
MTCA Method B Soil Cleanup Level^b			0.0625

Notes:

All results presented in milligrams per kilogram (mg/kg).

Bold Bold results exceed the laboratory reporting limit.

 Shaded results exceed the cleanup level.

AOI Area of Interest.

B Bottom.

SW Sidewall.

a Analyzed by EPA Method 8081B.

b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 9
Soil Analytical Data: AOI-7
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-7-B-1:0.9	0.9	6/19/2019	<0.01
AOI-7-B-2:0.11	0.1	6/19/2019	0.46
AOI-7-B-2:1.11	1.1	6/19/2019	0.14
AOI-7-B-2:2.1	2.1	8/13/2019	0.027
AOI-7-B-3:0.9	0.9	6/19/2019	<0.01
AOI-7-B-3:0.9 DUP-14	0.9	6/19/2019	<0.01
AOI-7-B-4:0.10	0.10	6/19/2019	<0.01
AOI-7-B-5:1	1	6/19/2019	<0.01
AOI-7-B-6:1	1	6/19/2019	0.029
AOI-7-B-6:1.0 DUP-17	1	6/19/2019	0.036
AOI-7-B-7:2	2	6/19/2019	0.033
AOI-7-B-8:1.5	1.5	6/19/2019	0.035
AOI-7-B-9:0.8	0.8	6/19/2019	<0.01
AOI-7-B-10:2.0	2	6/19/2019	0.021
AOI-7-B-11:1.5	1.5	6/19/2019	<0.01
AOI-7-B-12:0.8	0.8	6/19/2019	0.047
AOI-7-B-12:0.8 DUP-16	0.8	6/19/2019	<0.01
AOI-7-B-13:1	1	6/19/2019	<0.01
AOI-7-B-13:1 DUP-15	1	6/19/2019	<0.01
AOI-7-B-14:1.0	1	6/19/2019	0.051
AOI-7-B-15:1.0	1	6/19/2019	0.18
AOI-7-B-15:2	2	6/19/2019	0.35
AOI-7-B-15:3	3	8/13/2019	<0.01
AOI-7-B-16:1	1	6/19/2019	<0.01
AOI-7-B-16:2.5	2.5	10/2/2019	<0.01
AOI-7-B-17:0.8	0.8	8/12/2019	<0.01
AOI-7-B-18:0.9	0.9	8/12/2019	<0.01
AOI-7-B-19:1	1	8/12/2019	<0.01
AOI-7-SW-1:0.5	0.5	6/19/2019	0.054
AOI-7-SW-2:0.5	0.5	6/19/2019	0.13
AOI-7-SW-3:0.8	0.8	6/19/2019	<0.01
AOI-7-SW-4:0.6	0.6	6/19/2019	0.024
AOI-7-SW-5:0.10	0.10	6/19/2019	<0.01
AOI-7-SW-6:0.5	0.5	6/19/2019	<0.01
AOI-7-SW-7:0.5	0.5	6/19/2019	0.10
AOI-7-SW-8:0.5	0.5	6/19/2019	0.22
AOI-7-SW-9:0.9	0.9	8/12/2019	<0.01
AOI-7-SW-10:0.5	0.5	8/12/2019	<0.01
AOI-7-SW-10:0.5 Dup-82	0.5	8/12/2019	<0.01
AOI-7-SW-11:0.5	0.5	8/12/2019	0.017
AOI-7-SW-11:0.5 Dup-81	0.5	8/12/2019	0.011
AOI-7-SW-12:0.9	0.9	8/12/2019	<0.01
AOI-7-SW-13:0.6	0.6	8/12/2019	<0.01
AOI-7-SW-14:1.3	1.3	8/12/2019	<0.01
AOI-7-SW-15:0.5	0.5	8/12/2019	0.027
AOI-7-SW-16:0.5	0.5	8/12/2019	<0.01
AOI-7-SW-17:1.5	1.5	8/13/2019	<0.01
AOI-7-SW-18:1.5	1.5	8/13/2019	<0.01
AOI-7-SW-19:1.5	1.5	8/13/2019	<0.01
AOI-7-SW-19:1.5 Dup-83	1.5	8/13/2019	<0.01
AOI-7-SW-20:1.5	1.5	8/13/2019	0.012
AOI-7-SW-21:1.2	1.2	8/13/2019	0.2
AOI-7-SW-22:1.2	1.2	8/13/2019	0.058
AOI-7-SW-23:1.2	1.2	8/13/2019	<0.01
AOI-7-SW-24:1.2	1.2	8/13/2019	<0.01
AOI-7-SW-25:1.2	1.2	10/2/2019	<0.01
AOI-7-SW-26:1.2	1.2	10/2/2019	<0.01
AOI-7-SW-27:1.2	1.2	10/2/2019	<0.01
MTCA Method B Soil Cleanup Level ^b			0.0625

Notes:
All results presented in milligrams per kilogram (mg/kg).
Bold Bold results exceed the laboratory reporting limit.
 Shaded results exceed the cleanup level.
AOI Area of Interest.
B Bottom.
SW Sidewall.
a Analyzed by EPA Method 8081B.
b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 10
Soil Analytical Data: AOI-8
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-8-B-1:1.7	1.7	6/18/2019	0.14
AOI-8-B-1:2.7	2.7	6/18/2019	0.17
AOI-8-B-1:3.7	3.7	8/13/2019	<0.01
AOI-8-B-2:1.0	1	6/18/2019	0.31
AOI-8-B-2:1.0 DUP-10	1	6/18/2019	<0.01
AOI-8-B-2:2	2	6/18/2019	0.16
AOI-8-B-2:3	3	8/13/2019	<0.01
AOI-8-B-3:1.5	1.5	6/18/2019	0.025
AOI-8-B-4:1	1	6/18/2019	<0.01
AOI-8-B-4:1.0 DUP-12	1	6/18/2019	<0.01
AOI-8-B-5:1.5	1.5	6/18/2019	<0.01
AOI-8-B-6:1.5	1.5	6/18/2019	0.12
AOI-8-B-6:2.5	2.5	6/18/2019	0.067
AOI-8-B-6:3.5	3.5	8/13/2019	<0.01
AOI-8-B-6-:3.5 Dup-85	3.5	8/13/2019	<0.01
AOI-8-B-7:1.5	1.5	6/18/2019	1.5
AOI-8-B-7:1.5 DUP-13	1.5	6/18/2019	1.4
AOI-8-B-7:2.5	2.5	6/18/2019	1.5
AOI-8-B-7:3.5	3.5	8/13/2019	<0.01
AOI-8-B-8:1.5	1.5	6/18/2019	<0.01
AOI-8-B-9:1	1	6/18/2019	<0.01
AOI-8-B-10:1.0	1	6/18/2019	0.099
AOI-8-B-10:1.0 DUP-11	1	6/18/2019	0.13
AOI-8-B-10:2	2	6/18/2019	0.032
AOI-8-B-11:1.0	1	6/18/2019	<0.01
AOI-8-B-12:1	1	8/13/2019	<0.01
AOI-8-B-12:1 Dup-86	1	8/13/2019	<0.01
AOI-8-B-13:1	1	8/13/2019	0.013
AOI-8-B-14:1.5	1.5	8/13/2019	<0.01
AOI-8-B-15:1.5	1.5	8/13/2019	0.015
AOI-8-B-16:1	1	8/13/2019	<0.01
AOI-8-B-17:3	3	10/1/2019	<0.01
AOI-8-SW-1:1	1	6/18/2019	<0.01
AOI-8-SW-2:1.0	1	6/18/2019	0.14
AOI-8-SW-3:0.8	0.8	6/18/2019	0.12
AOI-8-SW-4:0.11	0.11	6/18/2019	0.28
AOI-8-SW-5:0.8	0.8	6/18/2019	0.11
AOI-8-SW-6:1	1	6/18/2019	<0.01
AOI-8-SW-7:1.0	1	8/13/2019	0.085
AOI-8-SW-8:1.0	1	8/13/2019	<0.01
AOI-8-SW-9:1.0	1	8/13/2019	<0.01
AOI-8-SW-10:1.0	1	8/13/2019	0.015
AOI-8-SW-11:0.5	0.5	8/13/2019	0.015
AOI-8-SW-12:0.5	0.5	8/13/2019	<0.01
AOI-8-SW-13:0.5	0.5	8/13/2019	<0.01
AOI-8-SW-13:0.5 Dup-84	0.5	8/13/2019	<0.01
AOI-8-SW-14:1.5	1.5	8/13/2019	<0.01
AOI-8-SW-15:1.5	1.5	8/13/2019	<0.01
AOI-8-SW-16:1.5	1.5	8/13/2019	<0.01
AOI-8-SW-17:2.5	2.5	8/13/2019	<0.01
AOI-8-SW-18:2.5	2.5	8/13/2019	<0.01
AOI-8-SW-19:2.5	2.5	8/13/2019	0.077
AOI-8-SW-20:2.5	2.5	8/13/2019	<0.01
AOI-8-SW-21:2.5	2.5	8/13/2019	<0.01
AOI-8-SW-22:2	2	8/13/2019	<0.01
AOI-8-SW-23:2.5	2.5	8/13/2019	<0.01
AOI-8-SW-24:2.5	2.5	8/13/2019	<0.01
AOI-8-SW-25:2.5	2.5	8/13/2019	<0.01
AOI-8-SW-26:2	2	10/1/2019	<0.01
AOI-8-SW-27:2	2	10/1/2019	<0.01
AOI-8-SW-28:2	2	10/1/2019	<0.01
MTCA Method B Soil Cleanup Level ^b			0.0625

Notes:
All results presented in milligrams per kilogram (mg/kg).
Bold Bold results exceed the laboratory reporting limit.
 Shaded results exceed the cleanup level.
AOI Area of Interest.
B Bottom.
SW Sidewall.
a Analyzed by EPA Method 8081B.
b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 11
Soil Analytical Data: AOI-9
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-9-B-1:0.9	0.9	6/19/2019	<0.01
AOI-9-SW-1:0.5	0.5	6/19/2019	<0.01
AOI-9-SW-2:0.5	0.5	6/19/2019	<0.01
AOI-9-SW-3:0.5	0.5	6/19/2019	<0.01
AOI-9-SW-4:0.5	0.5	6/19/2019	<0.01
MTCA Method B Soil Cleanup Level^b			0.0625

Notes:

All results presented in milligrams per kilogram (mg/kg).

AOI Area of Interest.

B Bottom.

SW Sidewall.

a Analyzed by EPA Method 8081B.

b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 12
Soil Analytical Data: AOI-10
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-10-B-1:1	1	6/20/2019	0.034
AOI-10-B-2:1	1	6/20/2019	0.16
AOI-10-B-2:2	2	6/20/2019	0.013
AOI-10-B-3:1.5	1.5	6/20/2019	0.035
AOI-10-B-4:1	1	6/20/2019	<0.01
AOI-10-B-5:1	1	6/20/2019	<0.01
AOI-10-B-6:1	1	6/20/2019	<0.01
AOI-10-B-6:1 DUP-18	1	6/20/2019	<0.01
AOI-10-B-7:1	1	6/20/2019	<0.01
AOI-10-B-8:1	1	6/20/2019	<0.01
AOI-10-B-9:3	3	6/20/2019	<0.01
AOI-10-B-10:1.5	1.5	6/20/2019	<0.01
AOI-10-B-11:1.5	1.5	6/20/2019	<0.01
AOI-10-B-11:1.5 DUP-19	1.5	6/20/2019	<0.01
AOI-10-B-12:2	2	6/20/2019	<0.01
AOI-10-B-13:1.8	1.8	6/20/2019	<0.01
AOI-10-B-13:1.8 DUP-20	1.8	6/20/2019	<0.01
AOI-10-B-14:1.5	1.5	8/13/2019	<0.01
AOI-10-B-15:1.5	1.5	8/13/2019	<0.01
AOI-10-SW-1:1.0	1	6/20/2019	<0.01
AOI-10-SW-2:0.7	0.7	6/20/2019	<0.01
AOI-10-SW-3:0.9	0.9	6/20/2019	<0.01
AOI-10-SW-4:0.3	0.3	6/20/2019	0.059
AOI-10-SW-5:0.3	0.3	6/20/2019	<0.01
AOI-10-SW-6:0.9	0.9	6/20/2019	<0.01
AOI-10-SW-7:0.7	0.7	6/20/2019	0.11
AOI-10-SW-8:0.9	0.9	6/20/2019	0.20
AOI-10-SW-9:0.5	0.5	8/13/2019	<0.01
AOI-10-SW-9:0.5 Dup-87	0.5	8/13/2019	<0.01
AOI-10-SW-10:0.5	0.5	8/13/2019	<0.01
AOI-10-SW-11:0.8	0.8	8/13/2019	<0.01
AOI-10-SW-12:1.2	1.2	8/13/2019	<0.01
AOI-10-SW-13:1	1	8/13/2019	<0.01
AOI-10-SW-14:1.5	1.5	8/13/2019	0.011
AOI-10-SW-15:1.5	1.5	8/13/2019	0.013
AOI-10-SW-16:1.5	1.5	8/13/2019	<0.01
AOI-10-SW-17:1.5	1.5	8/13/2019	<0.01
MTCA Method B Soil Cleanup Level^b			0.0625

Notes:

All results presented in milligrams per kilogram (mg/kg).

Bold Bold results exceed the laboratory reporting limit.

Shaded Shaded results exceed the cleanup level.

AOI Area of Interest.

B Bottom.

SW Sidewall.

^a Analyzed by EPA Method 8081B.

^b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 13
Soil Analytical Data: AOI-11
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-11-B-1:1.2	1.2	6/20/2019	0.068
AOI-11-B-1:2.2	2.2	6/20/2019	<0.01
AOI-11-B-2:2	2	6/20/2019	0.012
AOI-11-B-3:2	2	6/20/2019	0.17
AOI-11-B-3:2 DUP-21	2	6/20/2019	0.12
AOI-11-B-3:3	3	6/20/2019	0.015
AOI-11-B-4:1.2	1.2	6/20/2019	<0.01
AOI-11-B-5:2	2	6/20/2019	0.80
AOI-11-B-5:3	3	6/20/2019	0.10
AOI-11-B-5:4	4	8/14/2019	<0.01
AOI-11-B-6:2	2	6/20/2019	1.80
AOI-11-B-6:3	3	6/20/2019	0.11
AOI-11-B-6:4	4	8/22/2019	<0.01
AOI-11-B-7:1.5	1.5	6/20/2019	0.61
AOI-11-B-7:2.5	2.5	6/20/2019	0.066
AOI-11-B-7:3.5	3.5	8/22/2019	<0.01
AOI-11-B-8:2	2	6/21/2019	0.35
AOI-11-B-8:3	3	6/21/2019	0.43
AOI-11-B-8:4	4	8/14/2019	<0.01
AOI-11-B-8:4 DUP-89	4	8/14/2019	<0.01
AOI-11-B-9:1.5	1.5	6/21/2019	0.094
AOI-11-B-9:2.5	2.5	6/21/2019	0.012
AOI-11-B-10:1.5	1.5	6/21/2019	0.10
AOI-11-B-10:2.5	2.5	6/21/2019	0.074
AOI-11-B-10:3.5	3.5	8/14/2019	<0.01
AOI-11-B-11:1.5	1.5	6/21/2019	0.23
AOI-11-B-11:2.5	2.5	6/21/2019	0.046
AOI-11-B-12:1	1	6/21/2019	<0.01
AOI-11-B-13:1.2	1.2	6/21/2019	0.045
AOI-11-B-14:1.5	1.5	6/21/2019	0.16
AOI-11-B-14:1.5 DUP-22	1.5	6/21/2019	0.12
AOI-11-B-14:2.5	2.5	6/21/2019	0.27
AOI-11-B-14:3.5	3.5	8/14/2019	<0.01
AOI-11-B-15:1	1	8/14/2019	<0.01
AOI-11-B-16:1.5	1.5	8/14/2019	<0.01
AOI-11-B-17:2	2	10/1/2019	0.023
AOI-11-B-18:1	1	10/1/2019	<0.01
AOI-11-B-19:3	3	10/1/2019	<0.01
AOI-11-B-19:3 DUP-131	3	10/1/2019	<0.01
AOI-11-B-20:4	4	10/1/2019	<0.01
AOI-11-B-21:3	3	10/31/2019	<0.01
AOI-11-SW-1:0.5	0.5	6/20/2019	0.14
AOI-11-SW-2:1	1	6/19/2019	<0.01
AOI-11-SW-3:0.5	0.5	6/19/2019	0.019
AOI-11-SW-4:1	1	6/20/2019	0.076
AOI-11-SW-5:0.4	0.4	6/20/2019	<0.01
AOI-11-SW-6:1.0	1	6/20/2019	<0.01
AOI-11-SW-7:0.5	0.5	6/20/2019	0.037
AOI-11-SW-8:0.5	0.5	8/14/2019	0.08
AOI-11-SW-8:0.5 DUP-88	0.5	8/14/2019	0.052
AOI-11-SW-9:0.5	0.5	8/14/2019	0.017
AOI-11-SW-10:0.8	0.8	8/14/2019	0.038
AOI-11-SW-11:0.8	0.8	8/14/2019	0.019
AOI-11-SW-12:1	1	8/14/2019	0.34
AOI-11-SW-13:0.5	0.5	8/14/2019	<0.01
AOI-11-SW-14:0.8	0.8	8/14/2019	<0.01
AOI-11-SW-15:1	1	8/14/2019	<0.01
AOI-11-SW-16:0.8	0.8	8/14/2019	<0.01
AOI-11-SW-17:2	2	8/14/2019	<0.01
AOI-11-SW-18:2	2	8/14/2019	0.1
AOI-11-SW-19:2	2	8/14/2019	<0.01
AOI-11-SW-19:2 DUP-90	2	8/14/2019	<0.01
AOI-11-SW-20:2.5	2.5	8/14/2019	0.041
AOI-11-SW-21:2.5	2.5	8/14/2019	<0.01
AOI-11-SW-22:2	2	8/14/2019	0.025
AOI-11-SW-23:2	2	8/14/2019	0.014
AOI-11-SW-24:2.5	2.5	8/14/2019	<0.01
AOI-11-SW-25:1.5	1.5	8/14/2019	0.016
AOI-11-SW-26:1.5	1.5	8/14/2019	<0.01
AOI-11-SW-27:3	3	8/14/2019	0.075
AOI-11-SW-28:2.5	2.5	8/14/2019	0.029
AOI-11-SW-29:3	3	8/14/2019	<0.01

Table 13
Soil Analytical Data: AOI-11
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-11-SW-30:3	3	8/14/2019	0.059
AOI-11-SW-31:1.5	1.5	8/14/2019	<0.01
AOI-11-SW-32:3	3	8/14/2019	<0.01
AOI-11-SW-33:1	1	10/1/2019	0.071
AOI-11-SW-34:1	1	10/1/2019	0.11
AOI-11-SW-35:0.5	0.5	10/1/2019	0.039
AOI-11-SW-36:0.5	0.5	10/1/2019	0.023
AOI-11-SW-37:2	2	10/1/2019	<0.01
AOI-11-SW-38:2	2	10/1/2019	<0.01
AOI-11-SW-39:3	3	10/1/2019	<0.01
AOI-11-SW-40:3	3	10/1/2019	<0.01
AOI-11-SW-41:3	3	10/1/2019	<0.01
AOI-11-SW-42:1	1	10/31/2019	<0.01
AOI-11-SW-43:2	2	10/31/2019	<0.01
MTCA Method B Soil Cleanup Level ^b			0.0625

Notes:
All results presented in milligrams per kilogram (mg/kg).
Bold Bold results exceed the laboratory reporting limit.
 Shaded results exceed the cleanup level.
AOI Area of Interest.
B Bottom.
SW Sidewall.
a Analyzed by EPA Method 8081B.
b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 14
Soil Analytical Data: AOI-12
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-12-B-1:1.5	1.5	6/21/2019	<0.01
AOI-12-B-2:1.5	1.5	6/21/2019	<0.01
AOI-12-B-3:1.5	1.5	6/21/2019	0.031
AOI-12-B-3:1.5 DUP-23	1.5	6/21/2019	0.015
AOI-12-B-4:2.3	2.3	6/21/2019	<0.01
AOI-12-B-5:2.3	2.3	6/21/2019	<0.01
AOI-12-B-6:2.3	2.3	6/21/2019	<0.01
AOI-12-B-7:3	3	7/8/2019	<0.01
AOI-12-B-8:2	2	7/8/2019	<0.01
AOI-12-B-9:1.2	1.2	7/8/2019	<0.01
AOI-12-B-9:1.2 DUP-54	1.2	7/8/2019	0.011
AOI-12-B-10:1.2	1.2	7/8/2019	<0.01
AOI-12-B-11:1.5	1.5	7/8/2019	<0.01
AOI-12-B-12:1.0	1	7/8/2019	<0.01
AOI-12-B-13:1.5	1.5	7/8/2019	<0.01
AOI-12-B-14:0.5	0.5	7/8/2019	<0.01
AOI-12-B-15:3.3	3.3	8/14/2019	<0.01
AOI-12-B-16:3.3	3.3	8/14/2019	<0.01
AOI-12-B-17:1	1	8/14/2019	<0.01
AOI-12-B-17:1 DUP-91	1	8/14/2019	<0.01
AOI-12-B-18:1.5	1.5	8/14/2019	<0.01
AOI-12-B-19:1.5	1.5	8/19/2019	<0.01
AOI-12-SW-1:1	1	6/21/2019	0.29
AOI-12-SW-2:2	2	6/21/2019	0.13
AOI-12-SW-3:1.5	1.5	6/21/2019	<0.01
AOI-12-SW-4:1	1	6/21/2019	<0.01
AOI-12-SW-5:0.8	0.8	6/21/2019	<0.01
AOI-12-SW-5:0.8 DUP-24	0.8	6/21/2019	<0.01
AOI-12-SW-6:0.5	0.5	6/21/2019	<0.01
AOI-12-SW-7:0.5	0.5	6/21/2019	<0.01
AOI-12-SW-8:0.4	0.4	6/21/2019	0.014
AOI-12-SW-9:1	1	6/21/2019	0.11
AOI-12-SW-10:1	1	8/14/2019	<0.01
AOI-12-SW-11:2	2	8/14/2019	<0.01
AOI-12-SW-12:0.5	0.5	8/14/2019	0.024
AOI-12-SW-13:0.5	0.5	8/14/2019	<0.01
AOI-12-SW-14:1	1	8/14/2019	<0.01
AOI-12-SW-15:0.4	0.4	8/14/2019	<0.01
MTCA Method B Soil Cleanup Level ^b			0.0625

Notes:

All results presented in milligrams per kilogram (mg/kg).

Bold Bold results exceed the laboratory reporting limit.

Shaded results exceed the cleanup level.

AOI Area of Interest.

B Bottom.

SW Sidewall.

^a Analyzed by EPA Method 8081B.

^b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 15
Soil Analytical Data: AOI-13
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-13-B-1:1	1	6/25/2019	<0.01
AOI-13-B-2:1	1	6/25/2019	<0.01
AOI-13-B-3:2	2	6/25/2019	<0.01
AOI-13-B-4:1.5	1.5	6/25/2019	<0.01
AOI-13-B-5:1	1	6/25/2019	<0.01
AOI-13-B-6:1.5	1.5	6/25/2019	<0.01
AOI-13-B-7:1.0	1	6/25/2019	<0.01
AOI-13-B-8:1.5	1.5	6/25/2019	<0.01
AOI-13-B-9:1.6	1.6	8/15/2019	<0.01
AOI-13-B-10:1.5	1.5	8/15/2019	<0.01
AOI-13-B-11:1.5	1.5	8/15/2019	<0.01
AOI-13-B-12:1.5	1.5	10/1/2019	<0.01
AOI-13-SW-1:0.6	0.6	6/25/2019	<0.01
AOI-13-SW-2:0.9	0.9	6/25/2019	<0.01
AOI-13-SW-2:0.9 DUP-29	0.9	6/25/2019	<0.01
AOI-13-SW-3:0.7	0.7	6/25/2019	6.6
AOI-13-SW-4:0.9	0.9	6/25/2019	0.23
AOI-13-SW-5:0.6	0.6	6/25/2019	1.2
AOI-13-SW-6:1	1	6/25/2019	<0.01
AOI-13-SW-7:1.5	1.5	8/15/2019	<0.01
AOI-13-SW-8:0.5	0.5	8/15/2019	0.015
AOI-13-SW-9:0.8	0.8	8/15/2019	<0.01
AOI-13-SW-10:0.5	0.5	8/15/2019	<0.01
AOI-13-SW-11:0.8	0.8	8/15/2019	0.017
AOI-13-SW-12:0.8	0.8	8/15/2019	0.048
AOI-13-SW-12:0.8 Dup-92	0.8	8/15/2019	0.18
AOI-13-SW-13:0.5	0.5	8/15/2019	<0.01
AOI-13-SW-14:0.5	0.5	10/1/2019	<0.01
AOI-13-SW-15:0.8	0.8	10/1/2019	<0.01
AOI-13-SW-16:0.5	0.5	10/1/2019	<0.01
AOI-13-SW-16:0.5 DUP-130	0.5	10/1/2019	<0.01
MTCA Method B Soil Cleanup Level^b			0.0625

Notes:

All results presented in milligrams per kilogram (mg/kg).

Bold Bold results exceed the laboratory reporting limit.

Shaded results exceed the cleanup level.

AOI Area of Interest.

B Bottom.

SW Sidewall.

a Analyzed by EPA Method 8081B.

b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 16
Soil Analytical Data: AOI-14
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-14-B-1:0.8	0.8	6/24/2019	<0.01
AOI-14-B-2:0.8	0.8	6/24/2019	<0.01
AOI-14-B-3:1.3	1.3	6/24/2019	<0.01
AOI-14-B-4:1.5	1.5	6/24/2019	0.044
AOI-14-B-4:1.5 DUP-26	1.5	6/24/2019	0.072
AOI-14-B-4:2.5	2.5	6/24/2019	0.056
AOI-14-B-5:2	2	6/24/2019	0.073
AOI-14-B-5:3	3	6/24/2019	0.033
AOI-14-B-5:3	3	8/16/2019	<0.01
AOI-14-B-6:0.9	0.9	6/24/2019	0.33
AOI-14-B-6:1.9	1.9	6/24/2019	0.13
AOI-14-B-6:2.9	2.9	8/16/2019	<0.01
AOI-14-B-7:1.5	1.5	6/24/2019	0.094
AOI-14-B-7:2.5	2.5	6/24/2019	0.11
AOI-14-B-7:3.5	3.5	8/16/2019	<0.01
AOI-14-B-8:0.7	0.7	6/24/2019	<0.01
AOI-14-B-8:2.7	2.7	8/16/2019	<0.01
AOI-14-B-9:0.8	0.8	6/24/2019	0.038
AOI-14-B-10:1.3	1.3	6/24/2019	0.035
AOI-14-B-11:1.3	1.3	6/24/2019	0.055
AOI-14-B-12:2	2	6/24/2019	0.042
AOI-14-B-12:2 DUP-27	2	6/24/2019	0.049
AOI-14-B-13:1	1	6/24/2019	0.014
AOI-14-B-14:2	2	6/24/2019	0.025
AOI-14-B-15:0.8	0.8	6/24/2019	<0.01
AOI-14-B-16:0.5	0.5	6/24/2019	0.057
AOI-14-B-17:1	1	6/24/2019	<0.01
AOI-14-B-18:1	1	6/24/2019	0.098
AOI-14-B-18:2	2	6/24/2019	0.096
AOI-14-B-18:3	3	8/16/2019	<0.01
AOI-14-B-19:1	1	8/16/2019	<0.01
AOI-14-SW-1:0.5	0.5	6/24/2019	<0.01
AOI-14-SW-2:1	1	6/24/2019	<0.01
AOI-14-SW-3:1	1	6/24/2019	<0.01
AOI-14-SW-4:1	1	6/24/2019	<0.01
AOI-14-SW-5:0.4	0.4	6/24/2019	0.031
AOI-14-SW-6:0.5	0.5	6/24/2019	0.089
AOI-14-SW-6:0.5 DUP-25	0.5	6/24/2019	0.085
AOI-14-SW-7:0.5	0.5	6/24/2019	<0.01
AOI-14-SW-8:0.5	0.5	6/24/2019	<0.01
AOI-14-SW-9:1	1	8/15/2019	<0.01
AOI-14-SW-10:0.5	0.5	8/15/2019	<0.01
AOI-14-SW-11:0.5	0.5	8/15/2019	<0.01
AOI-14-SW-12:0.5	0.5	8/15/2019	<0.01
AOI-14-SW-13:1	1	8/16/2019	<0.01
AOI-14-SW-14:1	1	8/16/2019	<0.01
AOI-14-SW-15:1	1	8/16/2019	<0.01
AOI-14-SW-16:1	1	8/16/2019	0.013
AOI-14-SW-17:1.5	1.5	8/16/2019	0.016
AOI-14-SW-18:1	1	8/16/2019	0.015
AOI-14-SW-18:1 Dup-95	1	8/16/2019	0.014
AOI-14-SW-19:0.5	0.5	8/16/2019	<0.01
AOI-14-SW-20:1	1	8/16/2019	<0.01
AOI-14-SW-21:0.3	0.3	8/16/2019	0.011
AOI-14-SW-22:1	1	8/16/2019	0.016
AOI-14-SW-23:1	1	8/16/2019	<0.01
MTCA Method B Soil Cleanup Level ^b			0.0625

Notes:
All results presented in milligrams per kilogram (mg/kg).
Bold Bold results exceed the laboratory reporting limit.
 Shaded results exceed the cleanup level.
AOI Area of Interest.
SW Sidewall.
B Bottom.
a Analyzed by EPA Method 8081B.
b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 17
Soil Analytical Data: AOI-15
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-15-B-1:1	1	6/24/2019	0.029
AOI-15-B-2:2	2	6/24/2019	0.046
AOI-15-B-2:1	1	6/24/2019	0.072
AOI-15-B-3:1	1	6/24/2019	0.050
AOI-15-B-4:1	1	6/25/2019	0.21
AOI-15-B-4:1 DUP-28	1	6/25/2019	0.31
AOI-15-B-4:2	2	6/25/2019	0.012
AOI-15-B-5:1	1	6/25/2019	0.027
AOI-15-B-6:1.5	1.5	6/25/2019	0.064
AOI-15-B-6:2.5	2.5	6/25/2019	0.04
AOI-15-B-7:1.5	1.5	6/25/2019	<0.01
AOI-15-B-8:2	2	6/25/2019	<0.01
AOI-15-B-9:1.5	1.5	6/25/2019	0.16
AOI-15-B-9:2.5	2.5	6/25/2019	0.28
AOI-15-B-9:3.5	3.5	8/15/2019	<0.01
AOI-15-B-10:1	1	6/25/2019	<0.01
AOI-15-B-11:2	2	6/25/2019	<0.01
AOI-15-B-12:1.5	1.5	6/25/2019	<0.01
AOI-15-B-13:1.0	1	6/25/2019	<0.01
AOI-15-B-14:1.0	1	6/25/2019	<0.01
AOI-15-B-15:1	1	8/15/2019	<0.01
AOI-15-B-15:1 Dup-93	1	8/15/2019	<0.01
AOI-15-B-16:1	1	8/15/2019	<0.01
AOI-15-B-17:1.5	1.5	8/15/2019	<0.01
AOI-15-B-18:1	1	8/15/2019	<0.01
AOI-15-B-19:1	1	8/15/2019	<0.01
AOI-15-B-20:2	2	8/15/2019	<0.01
AOI-15-SW-1:0.5	0.5	6/24/2019	0.16
AOI-15-SW-2:0.5	0.5	6/24/2019	0.024
AOI-15-SW-3:0.7	0.7	6/24/2019	0.74
AOI-15-SW-4:0.5	0.5	6/24/2019	<0.01
AOI-15-SW-5:0.5	0.5	6/24/2019	<0.01
AOI-15-SW-6:0.7	0.7	6/24/2019	0.21
AOI-15-SW-7:0.2	0.2	6/24/2019	1.2
AOI-15-SW-8:0.5	0.5	8/15/2019	<0.01
AOI-15-SW-8:0.5 Dup-96	0.5	8/16/2019	<0.01
AOI-15-SW-9:0.5	0.5	8/15/2019	<0.01
AOI-15-SW-10:0.5	0.5	8/15/2019	<0.01
AOI-15-SW-11:1	1	8/15/2019	<0.01
AOI-15-SW-12:0.5	0.5	8/15/2019	<0.01
AOI-15-SW-13:0.8	0.8	8/15/2019	<0.01
AOI-15-SW-14:0.5	0.5	8/15/2019	<0.01
AOI-15-SW-15:0.5	0.5	8/15/2019	<0.01
AOI-15-SW-16:0.5	0.5	8/15/2019	<0.01
AOI-15-SW-17:2	2	8/15/2019	0.014
AOI-15-SW-18:2.5	2.5	8/15/2019	<0.01
AOI-15-SW-19:2	2	8/15/2019	0.05
AOI-15-SW-20:2	2	8/15/2019	<0.01
AOI-15-SW-21:1.5	1.5	8/15/2019	<0.01
AOI-15-SW-22:1.5	1.5	8/15/2019	<0.01
AOI-15-SW-22:1.5 Dup-94	1.5	8/15/2019	<0.01
AOI-15-SW-23:1.5	1.5	8/15/2019	<0.01
AOI-15-SW-24:1.5	1.5	8/15/2019	0.026
AOI-15-SW-25:2	2	8/15/2019	0.017
MTCA Method B Soil Cleanup Level ^b			0.0625

Notes:
All results presented in milligrams per kilogram (mg/kg).
Bold Bold results exceed the laboratory reporting limit.
 Shaded results exceed the cleanup level.
AOI Area of Interest.
SW Sidewall.
B Bottom.
a Analyzed by EPA Method 8081B.
b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 18
Soil Analytical Data: AOI-16
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-16-B-1:2	2	6/26/2019	<0.01
AOI-16-B-1:2 DUP-30	2	6/26/2019	<0.01
AOI-16-B-2:1.5	1.5	6/26/2019	0.063
AOI-16-B-2:2.5	2.5	6/26/2019	0.013
AOI-16-B-2:2.5 DUP-31	2.5	6/26/2019	0.028
AOI-16-B-3:1.5	1.5	6/26/2019	<0.01
AOI-16-B-4:1.5	1.5	6/26/2019	<0.01
AOI-16-B-5:1.5	1.5	6/26/2019	<0.01
AOI-16-B-6:1.5	1.5	6/26/2019	<0.01
AOI-16-B-7:1.5	1.5	6/26/2019	<0.01
AOI-16-B-8:1.5	1.5	6/26/2019	<0.01
AOI-16-B-9:1.5	1.5	6/26/2019	<0.01
AOI-16-B-10:3	3	8/16/2019	0.1
AOI-16-B-10:4	4	10/1/2019	<0.01
AOI-16-B-11:0.8	0.8	8/16/2019	0.015
AOI-16-B-12:1	1	10/1/2019	<0.01
AOI-16-B-12:2	2	8/16/2019	<0.01
AOI-16-B-13:1	1	10/31/2019	<0.01
AOI-16-B-13:2	2	8/16/2019	0.014
AOI-16-SW-1:0.7	0.7	6/25/2019	0.064
AOI-16-SW-2:0.9	0.9	6/25/2019	0.010
AOI-16-SW-3:2.0	2	6/25/2019	0.13
AOI-16-SW-4:1.0	1	6/25/2019	<0.01
AOI-16-SW-5:0.7	0.7	6/25/2019	0.074
AOI-16-SW-6:0.11	0.11	6/25/2019	0.10
AOI-16-SW-7:0.5	0.5	8/16/2019	1.5
AOI-16-SW-8:0.5	0.5	8/16/2019	<0.01
AOI-16-SW-9:1.5	1.5	8/16/2019	0.06
AOI-16-SW-10:1	1	8/16/2019	<0.01
AOI-16-SW-11:1	1	8/16/2019	<0.01
AOI-16-SW-12:1	1	8/16/2019	<0.01
AOI-16-SW-13:0.5	0.5	8/16/2019	0.044
AOI-16-SW-14:1	1	8/16/2019	<0.01
AOI-16-SW-15:0.5	0.5	8/16/2019	<0.01
AOI-16-SW-16:2	2	8/16/2019	<0.01
AOI-16-SW-17:2	2	8/16/2019	<0.01
AOI-16-SW-18:2	2	8/16/2019	<0.01
AOI-16-SW-19:0.5	0.5	8/16/2019	<0.01
AOI-16-SW-20:1.5	1.5	8/16/2019	<0.01
AOI-16-SW-21:0.5	0.5	8/16/2019	0.02
AOI-16-SW-22:3	3	10/1/2019	<0.01
AOI-16-SW-23:0.5	0.5	10/1/2019	0.062
AOI-16-SW-24:0.5	0.5	10/1/2019	1.9
AOI-16-SW-25:0.5	0.5	10/31/2019	0.015
AOI-16-SW-26:0.5	0.5	10/31/2019	<0.01
MTCA Method B Soil Cleanup Level ^b			0.0625

Notes:
All results presented in milligrams per kilogram (mg/kg).
Bold Bold results exceed the laboratory reporting limit.
 Shaded results exceed the cleanup level.
AOI Area of Interest.
SW Sidewall.
B Bottom.
a Analyzed by EPA Method 8081B.
b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 19
Soil Analytical Data: AOI-17
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-17-B-1:1.5	1.5	6/26/2019	0.012
AOI-17-B-2:1.5	1.5	6/26/2019	<0.01
AOI-17-B-2:1.5 DUP-32	1.5	6/26/2019	<0.01
AOI-17-B-3:1.5	1.5	6/26/2019	0.023
AOI-17-B-4:1.5	1.5	6/26/2019	<0.01
AOI-17-B-5:1.5	1.5	6/26/2019	0.012
AOI-17-B-6:1.5	1.5	6/26/2019	<0.01
AOI-17-B-7:1.5	1.5	6/26/2019	<0.01
AOI-17-B-7:1.5 DUP-33	1.5	6/26/2019	<0.01
AOI-17-B-8:1.5	1.5	6/26/2019	<0.01
AOI-17-B-9:2.0	2	6/26/2019	<0.01
AOI-17-B-10:2	2	6/26/2019	0.012
AOI-17-B-11:2.0	2	6/26/2019	0.020
AOI-17-B-12:1	1	8/16/2019	<0.01
AOI-17-B-13:1.5	1.5	8/16/2019	<0.01
AOI-17-B-14:1.5	1.5	8/16/2019	<0.01
AOI-17-B-14:1.5 Dup-97	1.5	8/16/2019	<0.01
AOI-17-B-15:1	1	8/16/2019	<0.01
AOI-17-B-16:1	1	8/16/2019	<0.01
AOI-17-SW-1:0.9	0.9	6/26/2019	0.24
AOI-17-SW-2:0.7	0.7	6/26/2019	0.068
AOI-17-SW-3:0.9	0.9	6/26/2019	<0.01
AOI-17-SW-4:1.0	1	6/26/2019	0.019
AOI-17-SW-5:1.0	1	6/26/2019	0.29
AOI-17-SW-6:0.9	0.9	6/26/2019	0.16
AOI-17-SW-7:0.5	0.5	8/16/2019	0.029
AOI-17-SW-8:0.8	0.8	8/16/2019	<0.01
AOI-17-SW-9:0.8	0.8	8/16/2019	<0.01
AOI-17-SW-10:0.8	0.8	8/16/2019	<0.01
AOI-17-SW-10:0.8 Dup-98	0.8	8/16/2019	<0.01
AOI-17-SW-11:0.5	0.5	8/16/2019	<0.01
AOI-17-SW-12:0.5	0.5	8/16/2019	<0.01
AOI-17-SW-13:0.5	0.5	8/16/2019	0.059
AOI-17-SW-14:0.5	0.5	8/16/2019	0.019
MTCA Method B Soil Cleanup Level^b			0.0625

Notes:

All results presented in milligrams per kilogram (mg/kg).

Bold Bold results exceed the laboratory reporting limit.

Shaded results exceed the cleanup level.

AOI Area of Interest.

SW Sidewall.

B Bottom.

a Analyzed by EPA Method 8081B.

b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 20
Soil Analytical Data: AOI-18
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-18-B-1:1.5	1.5	7/1/2019	<0.01
AOI-18-B-2:2	2	7/1/2019	0.4
AOI-18-B-2:3	3	7/1/2019	0.41
AOI-18-B-2:4	4	8/20/2019	0.019
AOI-18-B-3:2	2	7/1/2019	<0.01
AOI-18-B-3:3 DUP-44	3	7/1/2019	<0.01
AOI-18-B-4:1.5	1.5	7/1/2019	0.014
AOI-18-B-5:1	1	7/1/2019	<0.01
AOI-18-B-6:2	2	7/1/2019	<0.01
AOI-18-B-7:1	1	7/2/2019	<0.01
AOI-18-B-8:2.5	2.5	7/2/2019	0.012
AOI-18-B-9:1.5	1.5	7/2/2019	0.048
AOI-18-B-10:1	1	7/2/2019	0.033
AOI-18-B-11:1	1	7/2/2019	0.38
AOI-18-B-11:2	2	7/2/2019	0.010
AOI-18-B-12:2	2	7/2/2019	0.017
AOI-18-B-13:2	2	7/2/2019	<0.01
AOI-18-B-14:1.5	1.5	8/20/2019	<0.01
AOI-18-B-15:2	2	8/20/2019	<0.01
AOI-18-B-16:2	2	8/20/2019	<0.01
AOI-18-B-17:4	4	8/20/2019	<0.01
AOI-18-SW-1:0.5	1.5	7/1/2019	<0.01
AOI-18-SW-2:1	1	7/1/2019	<0.01
AOI-18-SW-3:0.5	1.5	7/1/2019	<0.01
AOI-18-SW-4:1	1	7/1/2019	0.26
AOI-18-SW-5:1	1	7/1/2019	0.95
AOI-18-SW-6:1	1	7/1/2019	0.083
AOI-18-SW-7:05	0.5	7/1/2019	<0.01
AOI-18-SW-8:1	1	8/20/2019	<0.01
AOI-18-SW-9:1	1	8/20/2019	0.024
AOI-18-SW-9:1 DUP-108	1	8/20/2019	<0.01
AOI-18-SW-10:1.5	1.5	8/20/2019	<0.01
AOI-18-SW-11:1.2	1.2	8/20/2019	<0.01
AOI-18-SW-11:1.2 DUP-107	1.2	8/20/2019	<0.01
AOI-18-SW-12:1	1	8/20/2019	<0.01
AOI-18-SW-13:1.5	1.5	8/20/2019	<0.01
AOI-18-SW-13:2.5	2.5	8/20/2019	<0.01
AOI-18-SW-14:2.5	2.5	8/20/2019	<0.01
AOI-18-SW-15:2.5	2.5	8/20/2019	<0.01
AOI-18-SW-16:2.5	2.5	8/20/2019	<0.01
AOI-18-SW-17:1.5	1.5	8/20/2019	<0.01
AOI-18-SW-18:1.5	1.5	8/20/2019	0.017
AOI-18-SW-19:1.5	1.5	8/20/2019	<0.01
MTCA Method B Soil Cleanup Level^b			0.0625

Notes:

All results presented in milligrams per kilogram (mg/kg).

Bold Bold results exceed the laboratory reporting limit.

Shaded Shaded results exceed the cleanup level.

AOI Area of Interest.

SW Sidewall.

B Bottom.

^a Analyzed by EPA Method 8081B.

^b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 21
Soil Analytical Data: AOI-19
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-19-B-1:1	1	7/2/2019	<0.01
AOI-19-B-2:1.5	1.5	7/2/2019	<0.01
AOI-19-B-3:1.5	1.5	7/2/2019	0.26
AOI-19-B-3:2.5	2.5	7/2/2019	<0.01
AOI-19-B-4:1.5	1.5	7/2/2019	<0.01
AOI-19-B-5:1.5	1.5	8/20/2019	<0.01
AOI-19-B-6:1.5	1.5	8/20/2019	<0.01
AOI-19-B-7:1.5	1.5	8/20/2019	<0.01
AOI-19-B-8:2	2	10/1/2019	<0.01
AOI-19-B-9:2.5	2.5	10/1/2019	<0.01
AOI-19-SW-1:1	1	7/2/2019	0.84
AOI-19-SW-1:1 DUP-45	1	7/2/2019	2.0
AOI-19-SW-2:0.5	0.5	7/2/2019	0.43
AOI-19-SW-2:2 DUP-106	2	8/20/2019	<0.01
AOI-19-SW-3:0.5	0.5	7/2/2019	0.24
AOI-19-SW-4:0.5	0.5	7/2/2019	<0.01
AOI-19-SW-5:0.5	0.5	8/20/2019	<0.01
AOI-19-SW-6:0.5	0.5	8/20/2019	<0.01
AOI-19-SW-7:1	1	8/20/2019	0.014
AOI-19-SW-8:0.8	0.8	8/20/2019	1.7
AOI-19-SW-9:0.5	0.5	8/20/2019	0.12
AOI-19-SW-10:2	2	8/20/2019	<0.01
AOI-19-SW-11:2	2	8/20/2019	<0.01
AOI-19-SW-12:2	2	8/20/2019	<0.01
AOI-19-SW-13:2	2	9/3/2019	<0.01
AOI-19-SW-14:0.5	0.5	10/1/2019	<0.01
AOI-19-SW-15:0.5	0.5	10/1/2019	<0.01
AOI-19-SW-16:0.5	0.5	10/1/2019	<0.01
AOI-19-SW-16:0.5 DUP-129	0.5	10/1/2019	<0.01
AOI-19-SW-17:1	1	10/1/2019	<0.01
AOI-19-SW-18:1	1	10/1/2019	<0.01
MTCA Method B Soil Cleanup Level^b			0.0625

Notes:

All results presented in milligrams per kilogram (mg/kg).

Bold Bold results exceed the laboratory reporting limit.

Shaded results exceed the cleanup level.

AOI Area of Interest.

SW Sidewall.

B Bottom.

a Analyzed by EPA Method 8081B.

b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 22
Soil Analytical Data: AOI-20
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-20-B-1:1	1	6/27/2019	<0.01
AOI-20-B-2:1.5	1.5	6/27/2019	<0.01
AOI-20-B-3:1.5	1.5	6/27/2019	<0.01
AOI-20-B-4:1.5	1.5	6/27/2019	<0.01
AOI-20-B-5:1.0 DUP-36	1	6/27/2019	<0.01
AOI-20-B-5:1.5	1.5	6/27/2019	<0.01
AOI-20-B-6:1.5	1.5	6/27/2019	<0.01
AOI-20-B-7:1.5	1.5	6/28/2019	<0.01
AOI-20-B-7:1.5 DUP-38	1.5	6/28/2019	<0.01
AOI-20-B-8:1.5	1.5	6/28/2019	0.066
AOI-20-B-8:2.5	2.5	6/28/2019	0.029
AOI-20-B-9:2.0	2	6/27/2019	<0.01
AOI-20-B-10:3	3	6/28/2019	<0.01
AOI-20-B-11:2	2	6/28/2019	0.78
AOI-20-B-11:3	3	6/28/2019	0.72
AOI-20-B-11:4	4	8/19/2019	<0.01
AOI-20-B-12:1.5	1.5	6/28/2019	<0.01
AOI-20-B-13:2.5	2.5	8/19/2019	0.058
AOI-20-B-14:2	2	8/19/2019	<0.01
AOI-20-B-15:1.5	1.5	8/19/2019	<0.01
AOI-20-B-16:1.5	1.5	8/19/2019	<0.01
AOI-20-B-17:3	3	10/1/2019	<0.01
AOI-20-B-18:3	3	10/31/2019	<0.01
AOI-20-B-18:3 Dup-134	3	10/31/2019	<0.01
AOI-20-SW-1:1.2	1.2	6/27/2019	2.0
AOI-20-SW-2:0.8	0.8	6/27/2019	0.66
AOI-20-SW-3:0.6	0.6	6/27/2019	0.40
AOI-20-SW-4:0.8	0.8	6/27/2019	0.40
AOI-20-SW-5:0.8	0.8	6/27/2019	0.016
AOI-20-SW-6:1.4	1.4	6/27/2019	0.017
AOI-20-SW-7:1.2	1.2	6/27/2019	0.036
AOI-20-SW-7:1.2 DUP-37	1.2	6/27/2019	<0.01
AOI-20-SW-8:0.5	0.5	8/19/2019	<0.01
AOI-20-SW-9:1.2	1.2	8/19/2019	<0.01
AOI-20-SW-10:1	1	8/19/2019	<0.01
AOI-20-SW-11:0.8	0.8	8/19/2019	<0.01
AOI-20-SW-12:0.8	0.8	8/19/2019	<0.01
AOI-20-SW-13:0.8	0.8	8/19/2019	<0.01
AOI-20-SW-14:0.5	0.5	8/19/2019	<0.01
AOI-20-SW-15:2	2	8/19/2019	0.15
AOI-20-SW-16:2	2	8/19/2019	<0.01
AOI-20-SW-17:3	3	8/19/2019	<0.01
AOI-20-SW-18:3	3	8/19/2019	<0.01
AOI-20-SW-19:3	3	8/19/2019	<0.01
AOI-20-SW-19:3 DUP-100	3	8/19/2019	<0.01
AOI-20-SW-20:2	2	8/19/2019	0.047
AOI-20-SW-20:2 DUP-101	2	8/19/2019	0.046
AOI-20-SW-21:3.5	3.5	8/19/2019	0.014
AOI-20-SW-22:2	2	10/1/2019	0.15
AOI-20-SW-23:2	2	10/1/2019	<0.01
AOI-20-SW-24:2	2	10/1/2019	0.018
AOI-20-SW-25:2	2	10/31/2019	0.018
AOI-20-SW-26:2	2	10/31/2019	<0.01
AOI-20-SW-27:2	2	10/31/2019	<0.01
MTCA Method B Soil Cleanup Level ^b			0.0625

Notes:
All results presented in milligrams per kilogram (mg/kg).
Bold Bold results exceed the laboratory reporting limit.
 Shaded results exceed the cleanup level.
AOI Area of Interest.
SW Sidewall.
B Bottom.
a Analyzed by EPA Method 8081B.
b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 23
Soil Analytical Data: AOI-21
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-21-B-1:1.5	1.5	6/28/2019	<0.01
AOI-21-B-1:1.5 DUP-40	1.5	6/28/2019	<0.01
AOI-21-B-2:1.5	1.5	6/28/2019	<0.01
AOI-21-B-3:1.5	1.5	6/28/2019	<0.01
AOI-21-B-4:0.5	0.5	6/28/2019	0.090
AOI-21-B-4:1.5	1.5	6/28/2019	0.30
AOI-21-B-4:2.5	2.5	8/16/2019	<0.01
AOI-21-B-5:1	1	6/28/2019	<0.01
AOI-21-B-6:1.5	1.5	6/28/2019	<0.01
AOI-21-B-7:1.5	1.5	6/28/2019	<0.01
AOI-21-B-8:1.5	1.5	6/28/2019	<0.01
AOI-21-B-9:2	2	6/28/2019	<0.01
AOI-21-B-10:2	2	6/28/2019	<0.01
AOI-21-B-11:2	2	6/28/2019	<0.01
AOI-21-B-12:1.5	1.5	6/28/2019	<0.01
AOI-21-B-13:1.5	1.5	8/16/2019	0.018
AOI-21-B-14:1.5	1.5	8/16/2019	<0.01
AOI-21-SW-1:1	1	6/28/2019	<0.01
AOI-21-SW-2:1.5	1.5	6/28/2019	<0.01
AOI-21-SW-2:1.5 DUP-39	1.5	6/28/2019	<0.01
AOI-21-SW-3:1.5	1.5	6/28/2019	<0.01
AOI-21-SW-4:1.5	1.5	6/28/2019	<0.01
AOI-21-SW-5:1.5	1.5	6/28/2019	<0.01
AOI-21-SW-6:0.5	0.5	6/28/2019	0.064
AOI-21-SW-7:1	1	6/28/2019	1.9
AOI-21-SW-8:0.3	0.3	6/28/2019	0.029
AOI-21-SW-9:1.5	1.5	8/16/2019	<0.01
AOI-21-SW-10:1	1	8/16/2019	<0.01
AOI-21-SW-11:1	1	8/16/2019	<0.01
AOI-21-SW-12:1	1	8/16/2019	<0.01
AOI-21-SW-13:2	2	8/16/2019	<0.01
AOI-21-SW-14:2	2	8/16/2019	<0.01
AOI-21-SW-14:2 Dup-99	2	8/16/2019	<0.01
AOI-21-SW-15:2	2	8/16/2019	<0.01
AOI-21-SW-16:2	2	8/16/2019	<0.01
MTCA Method B Soil Cleanup Level^b			0.0625

Notes:

All results presented in milligrams per kilogram (mg/kg).

Bold Bold results exceed the laboratory reporting limit.

Shaded Shaded results exceed the cleanup level.

AOI Area of Interest.

SW Sidewall.

B Bottom.

a Analyzed by EPA Method 8081B.

b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 24
Soil Analytical Data: AOI-22
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-22-B-1:2	2	6/27/2019	<0.01
AOI-22-B-2:1.5	1.5	6/27/2019	<0.01
AOI-22-B-3:2.0	2	6/27/2019	0.024
AOI-22-B-4:1.5	1.5	6/27/2019	<0.01
AOI-22-B-5:1	1	6/27/2019	<0.01
AOI-22-B-5:1.0 DUP-34	1	6/27/2019	<0.01
AOI-22-B-6:1.5	1.5	6/27/2019	<0.01
AOI-22-B-7:1.5	1.5	6/27/2019	<0.01
AOI-22-B-8:1.5	1.5	6/27/2019	<0.01
AOI-22-B-9:1.5	1.5	6/27/2019	<0.01
AOI-22-B-10:1.5	1.5	6/27/2019	<0.01
AOI-22-B-11:1.5	1.5	6/27/2019	<0.01
AOI-22-B-12:2	2	8/19/2019	<0.01
AOI-22-B-13:2	2	8/19/2019	<0.01
AOI-22-B-14:2	2	8/19/2019	<0.01
AOI-22-B-15:2	2	10/1/2019	<0.01
AOI-22-SW-1:0.4	0.4	6/27/2019	<0.01
AOI-22-SW-2:1.0	1	6/27/2019	0.22
AOI-22-SW-3:0.11	0.11	6/27/2019	0.22
AOI-22-SW-4:0.9	0.9	6/27/2019	0.064
AOI-22-SW-5:0.6	0.6	6/27/2019	0.053
AOI-22-SW-6:1.1	1.1	6/27/2019	<0.01
AOI-22-SW-7:0.6	0.6	6/27/2019	<0.01
AOI-22-SW-8:0.7 DUP-35	0.7	6/27/2019	<0.01
AOI-22-SW-9:1	1	8/19/2019	0.086
AOI-22-SW-10:1	1	8/19/2019	<0.01
AOI-22-SW-11:0.5	0.5	8/19/2019	<0.01
AOI-22-SW-12:0.5	0.5	8/19/2019	0.051
AOI-22-SW-13:1	1	8/19/2019	<0.01
AOI-22-SW-13:1 DUP-102	1	8/19/2019	<0.01
AOI-22-SW-14:1	1	9/3/2019	<0.01
AOI-22-SW-15:0.5	0.5	8/19/2019	<0.01
AOI-22-SW-16:0.5	0.5	8/19/2019	<0.01
AOI-22-SW-17:0.5	0.5	8/19/2019	<0.01
AOI-22-SW-18:0.5	0.5	10/1/2019	0.025
MTCA Method B Soil Cleanup Level^b			0.0625

Notes:

All results presented in milligrams per kilogram (mg/kg).

Bold Bold results exceed the laboratory reporting limit.

Shaded results exceed the cleanup level.

AOI Area of Interest.

SW Sidewall.

B Bottom.

a Analyzed by EPA Method 8081B.

b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 25
Soil Analytical Data: AOI-23
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-23-B-1:1	1	7/1/2019	0.098
AOI-23-B-1:2	2	7/1/2019	0.12
AOI-23-B-1:3	3	8/19/2019	<0.01
AOI-23-B-2:2	2	7/1/2019	0.032
AOI-23-B-2:2 DUP-42	2	7/1/2019	0.081
AOI-23-B-2:3	3	7/1/2019	0.035
AOI-23-B-3:1	1	7/1/2019	0.081
AOI-23-B-3:2	2	7/1/2019	0.040
AOI-23-B-4:1	1	7/1/2019	<0.01
AOI-23-B-5:1.5	1.5	7/1/2019	0.24
AOI-23-B-5:1.5 DUP-43	1.5	7/1/2019	0.59
AOI-23-B-5:2.5	2.5	7/1/2019	0.054
AOI-23-B-6:05	0.5	7/1/2019	<0.01
AOI-23-B-7:1	1	7/1/2019	0.1
AOI-23-B-7:2	2	7/1/2019	0.033
AOI-23-B-8:2	2	7/1/2019	0.12
AOI-23-B-8:3	3	7/1/2019	0.17
AOI-23-B-8:4	4	8/19/2019	<0.01
AOI-23-B-9:1	1	7/1/2019	0.067
AOI-23-B-9:2	2	7/1/2019	0.023
AOI-23-B-10:1	1	7/1/2019	0.014
AOI-23-B-11:1	1	7/1/2019	0.015
AOI-23-B-12:1	1	7/1/2019	0.074
AOI-23-B-12:2	2	7/1/2019	<0.01
AOI-23-B-13:1	1	7/1/2019	0.37
AOI-23-B-13:2	2	7/1/2019	<0.01
AOI-23-B-14:1	1	7/1/2019	0.033
AOI-23-B-15:1	1	7/1/2019	0.28
AOI-23-B-15:2	2	7/1/2019	0.06
AOI-23-B-16:1	1	7/1/2019	0.026
AOI-23-B-17:1.2	1.2	8/19/2019	<0.01
AOI-23-B-18:1	1	8/19/2019	<0.01
AOI-23-B-19:1	1	8/19/2019	<0.01
AOI-23-B-20:2	2	8/19/2019	<0.01
AOI-23-B-20:3 DUP-103	3	8/19/2019	<0.01
AOI-23-B-21:3	3	8/19/2019	<0.01
AOI-23-B-22:2.5	2.5	10/1/2019	0.017
AOI-23-B-23:3	3	10/1/2019	<0.01
AOI-23-B-24:2	2	10/1/2019	<0.01
AOI-23-B-25:3	3	10/31/2019	<0.01
AOI-23-B-26:4	4	10/31/2019	<0.01
AOI-23-SW-1:1	1	7/1/2019	<0.01
AOI-23-SW-2:2	2	7/1/2019	<0.01
AOI-23-SW-2:2 DUP-41	2	7/1/2019	<0.01
AOI-23-SW-3:0.5	0.5	7/1/2019	0.11
AOI-23-SW-4:0.3	0.3	7/1/2019	<0.01
AOI-23-SW-5:0.5	0.5	7/1/2019	0.11
AOI-23-SW-6:0.5	0.5	7/1/2019	0.037
AOI-23-SW-7:0.5	0.5	7/1/2019	0.022
AOI-23-SW-8:0.5	0.5	7/1/2019	0.21
AOI-23-SW-9:0.5	0.5	8/19/2019	0.02
AOI-23-SW-10:0.5	0.5	8/19/2019	<0.01
AOI-23-SW-11:1	1	8/19/2019	<0.01
AOI-23-SW-12:2	2	8/19/2019	<0.01
AOI-23-SW-13:2	2	8/19/2019	<0.01
AOI-23-SW-15:2	2	8/19/2019	0.019
AOI-23-SW-16:2	2	8/19/2019	<0.01
AOI-23-SW-17:2	2	8/19/2019	<0.01
AOI-23-SW-18:2	2	8/19/2019	<0.01
AOI-23-SW-19:1.5	1.5	8/19/2019	0.077
AOI-23-SW-20:1.5	1.5	8/19/2019	<0.01
AOI-23-SW-21:1.5	1.5	8/19/2019	<0.01
AOI-23-SW-22:1.5	1.5	8/19/2019	<0.01
AOI-23-SW-23:2	2	8/19/2019	<0.01
AOI-23-SW-24:2	2	8/19/2019	<0.01
AOI-23-SW-25:1	1	8/19/2019	<0.01
AOI-23-SW-26:1.5	1.5	8/19/2019	0.01
AOI-23-SW-26:1.5 DUP-105	1.5	8/19/2019	0.012
AOI-23-SW-27:2.5	2.5	8/19/2019	<0.01
AOI-23-SW-28:2.5	2.5	8/19/2019	<0.01
AOI-23-SW-29:1	1	8/19/2019	<0.01
AOI-23-SW-29:1 DUP-104	1	8/19/2019	<0.01
AOI-23-SW-30:0.5	0.5	8/19/2019	0.14
AOI-23-SW-31:1	1	8/19/2019	<0.01
AOI-23-SW-32:0.5	0.5	8/19/2019	<0.01
AOI-23-SW-33:0.5	0.5	8/19/2019	0.026
AOI-23-SW-34:1	1	8/19/2019	0.58
AOI-23-SW-34:1	1	8/19/2019	0.61 ve
AOI-23-SW-35:1.5	1.5	10/1/2019	<0.01
AOI-23-SW-36:1.5	1.5	10/1/2019	0.047
AOI-23-SW-37:2	2	10/1/2019	<0.01
AOI-23-SW-38:0.5	0.5	10/1/2019	3.1
AOI-23-SW-39:1	1	10/1/2019	0.095
AOI-23-SW-40:0.5	0.5	10/1/2019	<0.01
AOI-23-SW-41:0.5	0.5	10/1/2019	<0.01
AOI-23-SW-41:0.5 DUP-128	0.5	10/1/2019	<0.01
AOI-23-SW-42:1.5	1.5	10/31/2019	<0.01
AOI-23-SW-43:1.5	1.5	10/31/2019	<0.01

Table 25
Soil Analytical Data: AOI-23
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-23-SW-44:2	2	10/31/2019	<0.01
AOI-23-SW-45:2	2	10/31/2019	<0.01
AOI-23-SW-46:1	1	10/31/2019	<0.01
MTCA Method B Soil Cleanup Level ^b			0.0625

Notes:
All results presented in milligrams per kilogram (mg/kg).
Bold Bold results exceed the laboratory reporting limit.
 Shaded results exceed the cleanup level.
AOI Area of Interest.
SW Sidewall.
B Bottom.
a Analyzed by EPA Method 8081B.
b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Qualifier:
ve The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.


Table 26
Soil Analytical Data: AOI-24
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-24-B-1:1.5	1.5	7/2/2019	<0.01
AOI-24-B-2:1	1	7/2/2019	<0.01
AOI-24-B-3:2.5	2.5	7/2/2019	<0.01
AOI-24-B-4:2	2	7/2/2019	<0.01
AOI-24-B-4:2 DUP-46	2	7/2/2019	<0.01
AOI-24-B-5:1.5	1.5	7/2/2019	<0.01
AOI-24-B-6:2	2	7/2/2019	<0.01
AOI-24-B-7:1.5	1.5	8/20/2019	<0.01
AOI-24-B-8:2	2	8/20/2019	<0.01
AOI-24-B-9:2	2	8/20/2019	<0.01
AOI-24-SW-1:0.5	0.5	7/2/2019	<0.01
AOI-24-SW-2:0.5	0.5	7/2/2019	<0.01
AOI-24-SW-3:1	1	7/2/2019	0.79
AOI-24-SW-4:1	1	7/2/2019	0.011
AOI-24-SW-5:1	1	7/2/2019	<0.01
AOI-24-SW-6:0.5	0.5	7/2/2019	0.33
AOI-24-SW-7:1	1	7/2/2019	0.28
AOI-24-SW-8:0.5	0.5	7/2/2019	0.11
AOI-24-SW-9:1	1	8/20/2019	<0.01
AOI-24-SW-10:0.8	0.8	8/20/2019	<0.01
AOI-24-SW-11:1	1	8/20/2019	<0.01
AOI-24-SW-12:1	1	8/20/2019	<0.01
AOI-24-SW-13:1	1	8/20/2019	<0.01
AOI-24-SW-14:1.5	1.5	8/20/2019	<0.01
AOI-24-SW-15:1	1	8/20/2019	<0.01
AOI-24-SW-16:1	1	8/20/2019	0.060
MTCA Method B Soil Cleanup Level^b			0.0625

Notes:

All results presented in milligrams per kilogram (mg/kg).

Bold Bold results exceed the laboratory reporting limit.

 Shaded results exceed the cleanup level.

AOI Area of Interest.

SW Sidewall.

B Bottom.

a Analyzed by EPA Method 8081B.

b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 27
Soil Analytical Data: AOI-25
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-25-B-1:2	2	7/2/2019	<0.01
AOI-25-B-10:2	2	7/2/2019	0.063
AOI-25-B-10:3	3	7/2/2019	0.13
AOI-25-B-10:4	4	8/20/2019	<0.01
AOI-25-B-11:2	2	7/2/2019	1.2
AOI-25-B-11:3	3	7/2/2019	0.017
AOI-25-B-12:1	1	7/2/2019	<0.01
AOI-25-B-13:1	1	7/2/2019	0.041
AOI-25-B-14:1	1	7/2/2019	<0.01
AOI-25-B-15:2	2	8/20/2019	<0.01
AOI-25-B-16:2	2	8/20/2019	<0.01
AOI-25-B-17:2	2	8/20/2019	0.018
AOI-25-B-18:2	2	9/30/2019	<0.01
AOI-25-B-2:2	2	7/2/2019	0.039
AOI-25-B-2:3	3	7/2/2019	<0.01
AOI-25-B-3:2	2	7/2/2019	0.014
AOI-25-B-3:2 DUP-49	2	7/2/2019	0.012
AOI-25-B-4:2	2	7/2/2019	0.025
AOI-25-B-5:1.5	1.5	7/2/2019	0.028
AOI-25-B-5:2 DUP-50	2	7/2/2019	0.034
AOI-25-B-6:2	2	7/3/2019	0.2
AOI-25-B-6:3	3	7/3/2019	0.25
AOI-25-B-6:4	4	8/20/2019	<0.01
AOI-25-B-7:2	2	7/3/2019	0.52
AOI-25-B-7:3	3	7/3/2019	<0.01
AOI-25-B-8:2	2	7/3/2019	0.16
AOI-25-B-8:3	3	7/3/2019	0.011
AOI-25-B-9:2	2	7/3/2019	0.066
AOI-25-B-9:3	3	7/3/2019	0.091
AOI-25-B-9:4	4	8/20/2019	<0.01
AOI-25-SW-1:1	1	7/2/2019	0.5
AOI-25-SW-1:1 DUP-48	1	7/2/2019	0.01
AOI-25-SW-10:1.5	1.5	8/20/2019	<0.01
AOI-25-SW-11:1.5	1.5	8/20/2019	<0.01
AOI-25-SW-12:1	1	8/20/2019	<0.01
AOI-25-SW-13:1.5	1.5	8/20/2019	<0.01
AOI-25-SW-14:1.5	1.5	8/20/2019	<0.01
AOI-25-SW-15:0.8	0.8	8/20/2019	<0.01
AOI-25-SW-16:0.8	0.8	9/3/2019	0.12
AOI-25-SW-17:1	1	8/20/2019	0.044
AOI-25-SW-18:1	1	8/20/2019	<0.01
AOI-25-SW-18:1 DUP-111	1	8/20/2019	<0.01
AOI-25-SW-19:3	3	8/20/2019	<0.01
AOI-25-SW-2:1	1	7/2/2019	0.047
AOI-25-SW-20:3	3	8/20/2019	<0.01
AOI-25-SW-21:2.5	2.5	8/20/2019	0.034
AOI-25-SW-22:2.5	2.5	8/20/2019	0.01
AOI-25-SW-23:2.5	2.5	8/20/2019	<0.01
AOI-25-SW-24:3	3	8/20/2019	<0.01
AOI-25-SW-25:3	3	8/20/2019	<0.01
AOI-25-SW-26:0.8	0.8	9/30/2019	0.046
AOI-25-SW-26:3	3	8/20/2019	0.033
AOI-25-SW-27:0.8	0.8	9/30/2019	<0.01
AOI-25-SW-28:0.8	0.8	9/30/2019	<0.01
AOI-25-SW-3:1	1	7/2/2019	0.051
AOI-25-SW-4:0.5	0.5	7/2/2019	1.2
AOI-25-SW-5:0.5	0.5	7/2/2019	<0.01
AOI-25-SW-6:1	1	7/2/2019	0.15
AOI-25-SW-6:1 DUP-47	1	7/2/2019	0.19
AOI-25-SW-7:1	1	7/2/2019	<0.01
AOI-25-SW-8:1.5	1.5	8/20/2019	<0.01
AOI-25-SW-8:1.5 DUP-109	1.5	8/20/2019	<0.01
AOI-25-SW-9:1	1	8/20/2019	<0.01
AOI-25-SW-9:1 DUP-110	1	8/20/2019	<0.01
MTCA Method B Soil Cleanup Level ^b			0.0625

Notes:
All results presented in milligrams per kilogram (mg/kg).
Bold Bold results exceed the laboratory reporting limit.
 Shaded results exceed the cleanup level.
AOI Area of Interest.
SW Sidewall.
B Bottom.
a Analyzed by EPA Method 8081B.
b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 28
Soil Analytical Data: AOI-26
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-26-B-1:1	1	7/8/2019	<0.01
AOI-26-B-1:2	2	7/8/2019	<0.01
AOI-26-B-2:1	1	7/8/2019	<0.01
AOI-26-B-2:1.0 DUP-56	1	7/8/2019	<0.01
AOI-26-B-3:1	1	7/8/2019	1.3
AOI-26-B-3:2	2	7/8/2019	<0.01
AOI-26-B-4:1	1	7/8/2019	0.27
AOI-26-B-4:2	2	7/8/2019	0.028
AOI-26-B-5:1.5	1.5	7/9/2019	0.19
AOI-26-B-5:2.5	2.5	7/9/2019	<0.01
AOI-26-B-6:1.5	1.5	7/8/2019	0.016
AOI-26-B-7:1.5	1.5	7/8/2019	0.18
AOI-26-B-7:2.5	2.5	7/8/2019	<0.01
AOI-26-B-8:1	1	7/8/2019	<0.01
AOI-26-B-9:1	1	7/8/2019	0.022
AOI-26-B-10:1	1	7/8/2019	1.1
AOI-26-B-10:2	2	7/8/2019	<0.01
AOI-26-B-11:1	1	7/8/2019	<0.01
AOI-26-B-12:1.5	1.5	7/8/2019	0.066
AOI-26-B-12:2.5	2.5	7/8/2019	<0.01
AOI-26-B-13:1	1	8/21/2019	<0.01
AOI-26-B-14:1	1	8/21/2019	<0.01
AOI-26-B-15:1	1	8/21/2019	<0.01
AOI-26-B-16:1	1	8/21/2019	<0.01
AOI-26-B-17:1	1	8/21/2019	<0.01
AOI-26-B-18:1.2	1.2	8/21/2019	0.011
AOI-26-B-19:2	2	9/30/2019	<0.01
AOI-26-B-20:2	2	9/30/2019	<0.01
AOI-26-B-21:1.5	1.5	10/31/2019	<0.01
AOI-26-B-21:1.5 Dup-135	1.5	10/31/2019	<0.01
AOI-26-SW-1:0.5	0.5	7/8/2019	<0.01
AOI-26-SW-2:0.5	0.5	7/8/2019	0.097
AOI-26-SW-3:0.5	0.5	7/8/2019	0.18
AOI-26-SW-4:0.5	0.5	7/8/2019	0.048
AOI-26-SW-4:0.5 DUP-55	0.5	7/8/2019	0.057
AOI-26-SW-5:0.5	0.5	7/8/2019	0.21
AOI-26-SW-6:0.5	0.5	7/8/2019	0.11
AOI-26-SW-7:0.5	0.5	7/8/2019	<0.01
AOI-26-SW-8:0.8	0.8	8/21/2019	<0.01
AOI-26-SW-9:0.5	0.5	8/21/2019	0.021
AOI-26-SW-10:0.5	0.5	8/21/2019	0.023
AOI-26-SW-11:0.5	0.5	8/21/2019	<0.01
AOI-26-SW-12:0.5	0.5	8/21/2019	0.21
AOI-26-SW-13:1	1	8/21/2019	<0.01
AOI-26-SW-14:1	1	8/21/2019	<0.01
AOI-26-SW-15:0.8	0.8	8/21/2019	0.14
AOI-26-SW-16:1	1	8/21/2019	0.047
AOI-26-SW-17:1	1	8/21/2019	<0.01
AOI-26-SW-18:1	1	8/21/2019	<0.01
AOI-26-SW-19:0.5	0.5	8/21/2019	<0.01
AOI-26-SW-20:0.5	0.5	8/21/2019	0.059
AOI-26-SW-21:0.5	0.5	8/21/2019	<0.01
AOI-26-SW-22:0.5	0.5	8/21/2019	0.079
AOI-26-SW-23:1.5	1.5	8/21/2019	0.025
AOI-26-SW-24:1.5	1.5	8/21/2019	<0.01
AOI-26-SW-24:1.5 DUP-112	1.5	8/21/2019	<0.01
AOI-26-SW-25:1.5	1.5	8/21/2019	<0.01
AOI-26-SW-26:1.5	1.5	8/21/2019	<0.01
AOI-26-SW-27:0.5	0.5	9/30/2019	0.076
AOI-26-SW-28:0.5	0.5	9/30/2019	0.78
AOI-26-SW-29:1	1	9/30/2019	<0.01
AOI-26-SW-30:1	1	9/30/2019	<0.01
AOI-26-SW-30:1 DUP-127	1	9/30/2019	<0.01
AOI-26-SW-31:1	1	9/30/2019	0.018
AOI-26-SW-32:05	0.5	10/31/2019	<0.01
AOI-26-SW-33:05	0.5	10/31/2019	<0.01
AOI-26-SW-34:05	0.5	10/31/2019	<0.01
MTCA Method B Soil Cleanup Level ^b			0.0625

Notes:
All results presented in milligrams per kilogram (mg/kg).
Bold Bold results exceed the laboratory reporting limit.
 Shaded results exceed the cleanup level.
AOI Area of Interest.
SW Sidewall.
B Bottom.
a Analyzed by EPA Method 8081B.
b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 29
Soil Analytical Data: AOI-27
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-27-B-1:1.5	1.5	7/8/2019	0.065
AOI-27-B-1:2.5	2.5	7/8/2019	<0.01
AOI-27-B-2:2	2	7/8/2019	0.026
AOI-27-B-3:1.5	1.5	7/8/2019	0.032
AOI-27-B-3:1.5 DUP-61	1.5	7/8/2019	0.033
AOI-27-B-4:1.5	1.5	7/8/2019	0.013
AOI-27-B-5:1.5	1.5	7/8/2019	<0.01
AOI-27-B-6:1.5	1.5	7/8/2019	<0.01
AOI-27-B-7:2	2	7/9/2019	<0.01
AOI-27-B-8:2	2	7/9/2019	<0.01
AOI-27-B-9:1.5	1.5	7/9/2019	<0.01
AOI-27-B-10:1.5	1.5	7/9/2019	0.094
AOI-27-B-10:2.5	2.5	7/9/2019	0.23
AOI-27-B-10:3.5	3.5	8/21/2019	<0.01
AOI-27-B-11:2	2	7/9/2019	<0.01
AOI-27-B-11:2 DUP-62	2	7/9/2019	0.013
AOI-27-B-12:1	1	7/9/2019	<0.01
AOI-27-B-13:1	1	7/9/2019	<0.01
AOI-27-B-13:1 DUP-63	1	7/9/2019	<0.01
AOI-27-B-14:2	2	7/9/2019	0.11
AOI-27-B-14:3	3	7/9/2019	<0.01
AOI-27-B-15:2	2	7/9/2019	0.21
AOI-27-B-15:3	3	7/9/2019	0.038
AOI-27-B-16:1	1	7/9/2019	<0.01
AOI-27-B-17:2	2	7/9/2019	<0.01
AOI-27-B-18:1	1	7/9/2019	<0.01
AOI-27-B-19:1.5	1.5	7/9/2019	0.010
AOI-27-B-20:0.5	0.5	7/9/2019	0.022
AOI-27-B-20:1.5	1.5	7/9/2019	0.024
AOI-27-B-21:0.5	0.5	7/9/2019	0.031
AOI-27-B-22:1.5	1.5	7/9/2019	<0.01
AOI-27-B-23:1	1	8/21/2019	<0.01
AOI-27-B-24:1	1	8/21/2019	<0.01
AOI-27-B-25:1.5	1.5	8/21/2019	0.17
AOI-27-B-26:1	1	8/21/2019	0.01
AOI-27-B-27:1	1	8/21/2019	<0.01
AOI-27-B-28:3	3	9/30/2019	<0.01
AOI-27-B-28:3 DUP-125	3	9/30/2019	<0.01
AOI-27-B-29:3	3	9/30/2019	<0.01
AOI-27-B-30:1.5	1.5	9/30/2019	0.55
AOI-27-B-30:4	4	11/1/2019	<0.01
AOI-27-B-31:2	2	9/30/2019	0.32
AOI-27-B-31:4	4	11/1/2019	<0.01
AOI-27-B-32:2	2	9/30/2019	0.014
AOI-27-B-33:2	2	9/30/2019	<0.01
AOI-27-B-34:2	2	9/30/2019	0.072
AOI-27-B-34:2 DUP-126	2	9/30/2019	0.10
AOI-27-B-34:4	4	11/1/2019	<0.01
AOI-27-B-35:4	4	11/1/2019	<0.01
AOI-27-B-36:2	2	11/1/2019	<0.01
AOI-27-B-37:3	3	11/4/2019	<0.01
AOI-27-SW-1:1	1	7/8/2019	<0.01
AOI-27-SW-2:0.5	0.5	7/8/2019	<0.01
AOI-27-SW-3:0.5	0.5	7/8/2019	<0.01
AOI-27-SW-4:1	1	7/8/2019	0.36
AOI-27-SW-5:0.7	0.7	7/8/2019	0.48
AOI-27-SW-6:0.8	0.8	7/8/2019	<0.01
AOI-27-SW-7:0.6	0.6	7/8/2019	<0.01
AOI-27-SW-7:0.6 DUP-59	0.6	7/8/2019	<0.01
AOI-27-SW-8:0.5	0.5	7/8/2019	<0.01
AOI-27-SW-9:1	1	7/8/2019	0.023
AOI-27-SW-10:1.2	1.2	7/8/2019	0.013
AOI-27-SW-11:0.8	0.8	7/8/2019	0.010
AOI-27-SW-11:0.8 DUP-60	0.8	7/8/2019	<0.01
AOI-27-SW-12:1	1	7/8/2019	0.066
AOI-27-SW-13:0.6	0.6	7/8/2019	<0.01
AOI-27-SW-14:0.6	0.6	7/8/2019	0.11
AOI-27-SW-15:0.6	0.6	7/8/2019	0.011
AOI-27-SW-16:0.5	0.5	8/21/2019	0.09
AOI-27-SW-16:0.5 DUP-113	0.5	8/21/2019	0.059
AOI-27-SW-17:0.5	0.5	8/21/2019	<0.01
AOI-27-SW-18:0.8	0.8	8/21/2019	<0.01
AOI-27-SW-19:0.8	0.8	8/21/2019	0.1
AOI-27-SW-20:1	1	8/21/2019	<0.01
AOI-27-SW-21:1.2	1.2	8/21/2019	<0.01
AOI-27-SW-21:1.2 DUP-114	1.2	8/21/2019	<0.01
AOI-27-SW-22:0.5	0.5	8/21/2019	<0.01


Table 29
Soil Analytical Data: AOI-27
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-27-SW-23:0.5	0.5	8/21/2019	0.016
AOI-27-SW-24:0.8	0.8	8/21/2019	0.014
AOI-27-SW-25:1	1	8/21/2019	<0.01
AOI-27-SW-26:1	1	8/21/2019	<0.01
AOI-27-SW-27:1.5	1.5	8/21/2019	0.14
AOI-27-SW-28:1.5	1.5	8/21/2019	0.067
AOI-27-SW-29:1	1	8/21/2019	<0.01
AOI-27-SW-29:1 DUP-116	1	8/21/2019	<0.01
AOI-27-SW-30:1	1	8/21/2019	0.037
AOI-27-SW-31:1.2	1.2	8/21/2019	0.084
AOI-27-SW-32:0.5	0.5	8/21/2019	0.1
AOI-27-SW-33:0.5	0.5	8/21/2019	0.23
AOI-27-SW-34:0.5	0.5	8/21/2019	0.092
AOI-27-SW-35:1	1	8/21/2019	0.28
AOI-27-SW-36:1.8	1.8	8/21/2019	0.029
AOI-27-SW-36:1.8 DUP-115	1.8	8/21/2019	<0.01
AOI-27-SW-37:1.8	1.8	8/21/2019	<0.01
AOI-27-SW-38:2	2	9/30/2019	<0.01
AOI-27-SW-39:1.5	1.5	9/30/2019	0.03
AOI-27-SW-40:1.5	1.5	9/30/2019	<0.01
AOI-27-SW-41:1.5	1.5	9/30/2019	0.11
AOI-27-SW-42:0.5	0.5	9/30/2019	0.77 ve
AOI-27-SW-43:0.5	0.5	9/30/2019	0.19
AOI-27-SW-44:1	1	9/30/2019	0.75
AOI-27-SW-45:0.8	0.8	9/30/2019	<0.01
AOI-27-SW-46:0.5	0.5	9/30/2019	0.058
AOI-27-SW-47:0.5	0.5	11/1/2019	<0.01
AOI-27-SW-48:0.5	0.5	11/1/2019	<0.01
AOI-27-SW-49:1.5	1.5	11/4/2019	<0.01
AOI-27-SW-50:1.5	1.5	11/4/2019	<0.01
MTCA Method B Soil Cleanup Level ^b			0.0625

Notes:

All results presented in milligrams per kilogram (mg/kg).

Bold Bold results exceed the laboratory reporting limit.

 Shaded results exceed the cleanup level.

AOI Area of Interest.

SW Sidewall.

B Bottom.

a Analyzed by EPA Method 8081B.

b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Qualifier:

ve The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.


Table 30
Soil Analytical Data: AOI-28
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-28-B-1:1.5	1.5	7/9/2019	<0.01
AOI-28-B-1:1.5 DUP-64	1.5	7/9/2019	0.028
AOI-28-B-2:1.5	1.5	8/22/2019	<0.01
AOI-28-B-3:1.5	1.5	8/22/2019	<0.01
AOI-28-B-4:1.5	1.5	8/22/2019	<0.01
AOI-28-B-5:1.5	1.5	8/22/2019	<0.01
AOI-28-SW-1:0.5	0.5	7/9/2019	2.9
AOI-28-SW-2:0.5	0.5	7/9/2019	1.3
AOI-28-SW-3:1	1	7/9/2019	0.85
AOI-28-SW-4:0.5	0.5	7/9/2019	0.75
AOI-28-SW-5:0.5	0.5	8/22/2019	<0.01
AOI-28-SW-5:0.5 Dup-117	0.5	8/22/2019	<0.01
AOI-28-SW-6:0.5	0.5	8/22/2019	<0.01
AOI-28-SW-7:0.5	0.5	8/22/2019	<0.01
AOI-28-SW-8:0.5	0.5	8/22/2019	<0.01
MTCA Method B Soil Cleanup Level^b			0.0625

Notes:

All results presented in milligrams per kilogram (mg/kg).

Bold Bold results exceed the laboratory reporting limit.

 Shaded results exceed the cleanup level.

AOI Area of Interest.

SW Sidewall.

B Bottom.

^a Analyzed by EPA Method 8081B.

^b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 31
Soil Analytical Data: AOI-29
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-29-B-1:1	1	7/3/2019	<0.01
AOI-29-SW-1:0.25	0.25	7/3/2019	<0.01
AOI-29-SW-2:0.5	0.5	7/3/2019	<0.01
AOI-29-SW-3:0.5	0.5	7/3/2019	<0.01
AOI-29-SW-4:0.5	0.5	7/3/2019	<0.01
MTCA Method B Soil Cleanup Level^b			0.0625

Notes:

All results presented in milligrams per kilogram (mg/kg).

AOI Area of Interest.

SW Sidewall.

B Bottom.

a Analyzed by EPA Method 8081B.

b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 32
Soil Analytical Data: AOI-30
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-30-B-1:1	1	7/3/2019	0.081
AOI-30-B-1:2	2	7/3/2019	<0.01
AOI-30-B-2:2	2	7/3/2019	0.52
AOI-30-B-2:3	3	7/3/2019	0.022
AOI-30-B-3:2	2	7/3/2019	<0.01
AOI-30-B-4:1.5	1.5	7/3/2019	<0.01
AOI-30-B-5:2	2	7/3/2019	0.044
AOI-30-B-6:2	2	7/3/2019	<0.01
AOI-30-B-7:1.5	1.5	7/3/2019	<0.01
AOI-30-B-7:1.5 DUP-51	1.5	7/3/2019	<0.01
AOI-30-B-8:1.5	1.5	7/3/2019	0.44
AOI-30-B-8:2.5	2.5	7/3/2019	0.047
AOI-30-B-9:1.5	1.5	7/3/2019	0.011
AOI-30-B-10:1	1	7/3/2019	<0.01
AOI-30-B-11:2	2	7/3/2019	0.014
AOI-30-B-12:2	2	7/3/2019	0.36
AOI-30-B-12:3	3	7/3/2019	0.12
AOI-30-B-13:1	1	7/3/2019	0.094
AOI-30-B-13:2	2	7/3/2019	<0.01
AOI-30-B-14:1	1	7/3/2019	<0.01
AOI-30-B-15:1.5	1.5	7/3/2019	0.33
AOI-30-B-15:1.5 DUP-53	1.5	7/3/2019	0.27
AOI-30-B-15:2.5	2.5	7/3/2019	<0.01
AOI-30-B-16:1	1	8/22/2019	<0.01
AOI-30-B-17:4	4	8/22/2019	<0.01
AOI-30-SW-1:1	1	7/3/2019	0.017
AOI-30-SW-2:1	1	7/3/2019	0.065
AOI-30-SW-3:0.5	0.5	7/3/2019	<0.01
AOI-30-SW-4:0.5	0.5	7/3/2019	0.015
AOI-30-SW-5:0.5	0.5	7/3/2019	<0.01
AOI-30-SW-6:0.5	0.5	7/3/2019	0.012
AOI-30-SW-7:1	1	7/3/2019	0.033
AOI-30-SW-7:1 DUP-52	1	7/3/2019	0.051
AOI-30-SW-8:1	1	8/22/2019	<0.01
AOI-30-SW-8:1 Dup-118	1	8/22/2019	<0.01
AOI-30-SW-9:1	1	8/22/2019	0.011
AOI-30-SW-10:1	1	8/22/2019	<0.01
AOI-30-SW-11:1	1	8/22/2019	<0.01
AOI-30-SW-12:1	1	8/22/2019	<0.01
AOI-30-SW-13:1	1	8/22/2019	<0.01
AOI-30-SW-14:1	1	8/22/2019	<0.01
AOI-30-SW-15:1	1	8/22/2019	<0.01
AOI-30-SW-16:1	1	8/22/2019	<0.01
AOI-30-SW-17:1	1	8/22/2019	<0.01
AOI-30-SW-18:1	1	8/22/2019	<0.01
AOI-30-SW-19:0.5	0.5	8/22/2019	<0.01
AOI-30-SW-20:1	1	8/22/2019	<0.01
AOI-30-SW-21:1	1	8/22/2019	<0.01
MTCA Method B Soil Cleanup Level ^b			0.0625

Notes:
All results presented in milligrams per kilogram (mg/kg).
Bold Bold results exceed the laboratory reporting limit.
 Shaded results exceed the cleanup level.
AOI Area of Interest.
SW Sidewall.
B Bottom.
a Analyzed by EPA Method 8081B.
b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 33
Soil Analytical Data: AOI-31
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-31-B-1:1.5	1.5	7/9/2019	<0.01
AOI-31-B-1:1.5 DUP-65	1.5	7/9/2019	<0.01
AOI-31-B-2:1.5	1.5	7/9/2019	<0.01
AOI-31-B-2:2.5	2.5	7/9/2019	<0.01
AOI-31-B-3:1.5	1.5	7/9/2019	<0.01
AOI-31-B-4:1.5	1.5	7/9/2019	<0.01
AOI-31-SW-1:1	1	7/9/2019	<0.01
AOI-31-SW-2:0.8	0.8	7/9/2019	0.018
AOI-31-SW-3:0.5	0.5	7/9/2019	<0.01
AOI-31-SW-4:0.5	0.5	7/9/2019	<0.01
AOI-31-SW-5:1	1	7/9/2019	0.057
AOI-31-SW-6:0.8	0.8	7/9/2019	0.025
MTCA Method B Soil Cleanup Level^b			0.0625

Notes:

All results presented in milligrams per kilogram (mg/kg).

Bold Bold results exceed the laboratory reporting limit.

AOI Area of Interest.

SW Sidewall.

B Bottom.

a Analyzed by EPA Method 8081B.

b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 34
Soil Analytical Data: AOI-32
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-32-B-1:2	2	7/9/2019	<0.01
AOI-32-B-10:1.5	1.5	7/10/2019	<0.01
AOI-32-B-11:2	2	7/10/2019	0.13
AOI-32-B-11:3	3	7/10/2019	<0.01
AOI-32-B-12:2	2	7/10/2019	0.23
AOI-32-B-12:3	3	7/10/2019	<0.01
AOI-32-B-13:1.5	1.5	7/10/2019	1.1
AOI-32-B-13:2.5	2.5	7/10/2019	<0.01
AOI-32-B-14:1.5	1.5	7/10/2019	0.062
AOI-32-B-15:1.5	1.5	7/10/2019	<0.01
AOI-32-B-15:2.5 ht	2.5	7/10/2019	<0.01
AOI-32-B-2:1.5	1.5	7/9/2019	<0.01
AOI-32-B-3:2	2	7/9/2019	<0.01
AOI-32-B-4:2	2	7/9/2019	0.012
AOI-32-B-5:2	2	7/9/2019	<0.01
AOI-32-B-6:1.5	1.5	7/9/2019	<0.01
AOI-32-B-6:1.5 DUP-66	1.5	7/9/2019	<0.01
AOI-32-B-7:2	2	7/9/2019	<0.01
AOI-32-B-8:2	2	7/9/2019	<0.01
AOI-32-B-9:2	2	7/10/2019	0.062
AOI-32-B-9:2 DUP-68	2	7/10/2019	0.013
AOI-32-SW-1:1	1	7/9/2019	<0.01
AOI-32-SW-10:1	1	8/22/2019	<0.01
AOI-32-SW-2:0.8	0.8	7/9/2019	<0.01
AOI-32-SW-3:1	1	7/9/2019	<0.01
AOI-32-SW-4:1	1	7/9/2019	<0.01
AOI-32-SW-4:1 DUP-67	1	7/9/2019	<0.01
AOI-32-SW-5:1	1	7/10/2019	0.027
AOI-32-SW-6:1	1	7/10/2019	<0.01
AOI-32-SW-6:1 DUP-69	1	7/10/2019	<0.01
AOI-32-SW-7:1	1	7/9/2019	0.028
AOI-32-SW-8:1.5	1.5	8/22/2019	0.013
AOI-32-SW-9:1.5	1.5	8/22/2019	<0.01
MTCA Method B Soil Cleanup Level^b			0.0625

Notes:

All results presented in milligrams per kilogram (mg/kg).

Bold Bold results exceed the laboratory reporting limit.

Shaded Shaded results exceed the cleanup level.

AOI Area of Interest.

SW Sidewall.

B Bottom.

^a Analyzed by EPA Method 8081B.

^b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Qualifier:

ht The analysis was performed outside the method or client-specified holding time requirement.

Table 35
Soil Analytical Data: AOI-33
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-33-B-1:2	2	7/10/2019	0.25
AOI-33-B-1:3	3	7/10/2019	<0.01
AOI-33-B-2:2	2	7/10/2019	0.026
AOI-33-B-3:2	2	7/10/2019	0.1
AOI-33-B-3:3	3	7/10/2019	<0.01
AOI-33-B-4:1	1	7/10/2019	0.064
AOI-33-B-4:2	2	7/10/2019	0.035
AOI-33-B-5:1.5	1.5	7/10/2019	<0.01
AOI-33-B-5:1.5 DUP-71	1.5	7/10/2019	<0.01
AOI-33-B-6:2	2	7/10/2019	<0.01
AOI-33-B-7:1	1	7/10/2019	<0.01
AOI-33-B-8:1	1	7/10/2019	0.032
AOI-33-B-9:2	2	7/10/2019	0.57
AOI-33-B-9:3	3	7/10/2019	0.054
AOI-33-B-10:1	1	7/10/2019	<0.01
AOI-33-B-11:2	2	7/10/2019	0.24
AOI-33-B-11:3	3	7/10/2019	<0.01
AOI-33-B-12:1.5	1.5	7/10/2019	0.03
AOI-33-B-13:1	1	8/22/2019	<0.01
AOI-33-B-14:1.5	1.5	8/22/2019	<0.01
AOI-33-B-15:2	2	9/30/2019	<0.01
AOI-33-SW-1:1	1	7/10/2019	<0.01
AOI-33-SW-3:1	1	7/10/2019	<0.01
AOI-33-SW-4:1	1	7/10/2019	<0.01
AOI-33-SW-5:1	1	7/10/2019	0.13
AOI-33-SW-6:1	1	7/10/2019	0.014
AOI-33-SW-6:1 DUP-70	1	7/10/2019	<0.01
AOI-33-SW-7:1	1	7/10/2019	<0.01
AOI-33-SW-8:1	1	8/22/2019	<0.01
AOI-33-SW-9:1	1	8/22/2019	0.01
AOI-33-SW-10:1.5	1.5	8/22/2019	0.13
AOI-33-SW-11:1	1	8/22/2019	<0.01
AOI-33-SW-11:1 Dup-120	1	8/22/2019	<0.01
AOI-33-SW-12:1	1	8/22/2019	<0.01
AOI-33-SW-12:1 Dup-119	1	8/22/2019	<0.01
AOI-33-SW-13:1	1	8/22/2019	<0.01
AOI-33-SW-13:1	1	8/22/2019	<0.01
AOI-33-SW-15:0.5	0.5	8/22/2019	<0.01
AOI-33-SW-16:0.5	0.5	8/22/2019	<0.01
AOI-33-SW-17:1	1	8/22/2019	<0.01
AOI-33-SW-18:1	1	8/22/2019	<0.01
AOI-33-SW-19:1	1	8/22/2019	<0.01
AOI-33-SW-2:1	1	7/10/2019	<0.01
AOI-33-SW-20:1	1	8/22/2019	0.033
AOI-33-SW-21:1	1	8/22/2019	<0.01
AOI-33-SW-22:1.5	1.5	9/30/2019	<0.01
AOI-33-SW-23:1.5	1.5	9/30/2019	<0.01
AOI-33-SW-24:1.5	1.5	9/30/2019	<0.01
MTCA Method B Soil Cleanup Level ^b			0.0625

Notes:
All results presented in milligrams per kilogram (mg/kg).
Bold Bold results exceed the laboratory reporting limit.
Shaded Shaded results exceed the cleanup level.
AOI Area of Interest.
SW Sidewall.
B Bottom.
a Analyzed by EPA Method 8081B.
b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 36
Soil Analytical Data: AOI-34
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-34-B-1:1	1	7/10/2019	0.83
AOI-34-B-1:2	2	7/10/2019	0.023
AOI-34-B-2:1	1	7/10/2019	0.19
AOI-34-B-2:2	2	7/10/2019	0.052
AOI-34-B-3:0.5	0.5	8/23/2019	<0.01
AOI-34-B-4:0.5	0.5	8/23/2019	<0.01
AOI-34-B-5:0.5	0.5	8/23/2019	<0.01
AOI-34-B-6:1	1	9/30/2019	<0.01
AOI-34-B-7:1	1	11/4/2019	<0.01
AOI-34-SW-1:0.5	0.5	7/10/2019	2.4
AOI-34-SW-2:0.5	0.5	7/10/2019	0.063
AOI-34-SW-3:0.5	0.5	7/10/2019	0.094
AOI-34-SW-4:0.5	0.5	7/10/2019	0.027
AOI-34-SW-4:0.5 DUP-72	0.5	7/10/2019	0.022
AOI-34-SW-5:0.5	0.5	8/23/2019	3.2
AOI-34-SW-6:0.5	0.5	8/23/2019	0.013
AOI-34-SW-6:0.5 DUP-121	0.5	8/23/2019	<0.01
AOI-34-SW-7:0.5	0.5	8/23/2019	<0.01
AOI-34-SW-8:0.5	0.5	8/23/2019	<0.01
AOI-34-SW-8:0.5	0.5	8/23/2019	0.061
AOI-34-SW-9:0.5	0.5	8/23/2019	<0.01
AOI-34-SW-10:0.5	0.5	8/23/2019	0.061
AOI-34-SW-11:0.5	0.5	8/23/2019	<0.01
AOI-34-SW-12:0.5	0.5	8/23/2019	<0.01
AOI-34-SW-13:0.8	0.8	9/30/2019	0.14
AOI-34-SW-14:0.5	0.5	9/30/2019	0.14
AOI-34-SW-15:0.5	0.5	9/30/2019	0.15
AOI-34-SW-16:0.5	0.5	11/4/2019	<0.01
AOI-34-SW-17:0.5	0.5	11/4/2019	0.018
AOI-34-SW-18:0.5	0.5	11/4/2019	<0.01
AOI-34-SW-19:0.5	0.5	11/4/2019	<0.01
MTCA Method B Soil Cleanup Level^b			0.0625

Notes:

All results presented in milligrams per kilogram (mg/kg).

Bold Bold results exceed the laboratory reporting limit.

Shaded results exceed the cleanup level.

AOI Area of Interest.

SW Sidewall.

B Bottom.

^a Analyzed by EPA Method 8081B.

^b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 37
Soil Analytical Data: AOI-35
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-35-B-1:2	2	7/11/2019	0.063
AOI-35-B-1:3	3	7/11/2019	<0.01
AOI-35-B-2:1	1	7/11/2019	<0.01
AOI-35-B-3:1.5	1.5	7/11/2019	<0.01
AOI-35-B-4:1	1	7/11/2019	0.039
AOI-35-B-5:2	2	7/11/2019	0.11
AOI-35-B-5:3	3	7/11/2019	0.053
AOI-35-B-6:1.5	1.5	7/11/2019	0.11
AOI-35-B-6:1.5 Dup-75	1.5	7/11/2019	0.52
AOI-35-B-6:2.5	2.5	7/11/2019	<0.01
AOI-35-B-7:1.5	1.5	7/11/2019	0.019
AOI-35-B-8:2	2	7/11/2019	1.0
AOI-35-B-8:3	3	7/11/2019	0.055
AOI-35-B-9:2	2	7/11/2019	3.8
AOI-35-B-9:3	3	7/11/2019	0.051
AOI-35-B-10:2	2	7/11/2019	0.22
AOI-35-B-10:3	3	7/11/2019	<0.01
AOI-35-B-11:1	1	8/23/2019	<0.01
AOI-35-B-12:1	1	8/23/2019	<0.01
AOI-35-B-13:2	2	9/30/2019	0.18
AOI-35-B-13:3.5	3.5	11/4/2019	<0.01
AOI-35-B-14:2	2	9/30/2019	<0.01
AOI-35-B-15:2	2	11/4/2019	<0.01
AOI-35-B-15:2 AOI-DUP-137	2	11/4/2019	<0.01
AOI-35-SW-1:1	1	7/11/2019	0.017
AOI-35-SW-1:1 Dup-74	1	7/11/2019	0.016
AOI-35-SW-2:1	1	7/11/2019	<0.01
AOI-35-SW-3:1	1	7/11/2019	0.024
AOI-35-SW-4:1	1	7/11/2019	0.013
AOI-35-SW-5:0.75	0.75	7/11/2019	0.019
AOI-35-SW-6:1	1	7/11/2019	0.26
AOI-35-SW-7:1	1	8/23/2019	<0.01
AOI-35-SW-8:1	1	8/23/2019	0.039
AOI-35-SW-9:1	1	8/23/2019	0.11
AOI-35-SW-10:1	1	8/23/2019	0.10
AOI-35-SW-11:1.5	1.5	8/23/2019	0.013
AOI-35-SW-12:1	1	8/23/2019	<0.01
AOI-35-SW-12:1 DUP-122	1	8/23/2019	<0.01
AOI-35-SW-13:1	1	8/23/2019	<0.01
AOI-35-SW-14:1	1	8/23/2019	<0.01
AOI-35-SW-15:1	1	8/23/2019	<0.01
AOI-35-SW-16:1	1	8/23/2019	<0.01
AOI-35-SW-17:1	1	9/30/2019	0.052
AOI-35-SW-17:1 DUP-124	1	9/30/2019	0.076
AOI-35-SW-18:1	1	9/30/2019	<0.01
AOI-35-SW-19:1	1	9/30/2019	0.19
AOI-35-SW-20:1	1	11/4/2019	<0.01
AOI-35-SW-21:2.5	2.5	11/4/2019	<0.01
AOI-35-SW-22:1	1	11/4/2019	<0.01
AOI-35-SW-23:1	1	11/4/2019	<0.01
AOI-35-SW-24:1	1	11/4/2019	<0.01
MTCA Method B Soil Cleanup Level ^b			0.0625

Notes:
All results presented in milligrams per kilogram (mg/kg).
Bold Bold results exceed the laboratory reporting limit.
 Shaded results exceed the cleanup level.
AOI Area of Interest.
SW Sidewall.
B Bottom.
a Analyzed by EPA Method 8081B.
b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 38
Soil Analytical Data: AOI-36
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a
AOI-36-B-1:2	2	7/11/2019	<0.01
AOI-36-B-2:1	1	7/11/2019	0.058
AOI-36-B-3:1	1	7/11/2019	<0.01
AOI-36-B-3:1 Dup-76	1	7/11/2019	0.01
AOI-36-B-4:2	2	7/11/2019	<0.01
AOI-36-B-5:1.5	1.5	7/11/2019	<0.01
AOI-36-B-6:2	2	7/11/2019	<0.01
AOI-36-B-7:0.5	0.5	8/23/2019	<0.01
AOI-36-B-7:0.5 DUP-123	0.5	8/23/2019	0.025
AOI-36-B-8:0.2	0.2	8/23/2019	<0.01
AOI-36-B-9:1	1	9/30/2019	<0.01
AOI-36-B-10:1.0	1	11/4/2019	<0.01
AOI-36-SW-1:0.5	0.5	7/11/2019	<0.01
AOI-36-SW-2:0.5	0.5	7/11/2019	1.5
AOI-36-SW-3:1	1	7/11/2019	<0.01
AOI-36-SW-4:1	1	7/11/2019	<0.01
AOI-36-SW-5:0.25	0.25	7/11/2019	0.092
AOI-36-SW-6:0.5	0.5	8/23/2019	<0.01
AOI-36-SW-7:0.5	0.5	8/23/2019	0.30
AOI-36-SW-8:0.5	0.5	8/23/2019	0.026
AOI-36-SW-9:0.5	0.5	8/23/2019	0.024
AOI-36-SW-10:0.5	0.5	8/23/2019	<0.01
AOI-36-SW-11:0.5	0.5	8/23/2019	<0.01
AOI-36-SW-12:0.5	0.5	9/30/2019	0.092
AOI-36-SW-13:0.5	0.5	9/30/2019	0.028
AOI-36-SW-14:0.5	0.5	9/30/2019	0.029
AOI-36-SW-15:0.5	0.5	11/4/2019	<0.01
AOI-36-SW-16:0.5	0.5	11/4/2019	<0.01
MTCA Method B Soil Cleanup Level^b			0.0625

Notes:

All results presented in milligrams per kilogram (mg/kg).

Bold Bold results exceed the laboratory reporting limit.

Shaded Shaded results exceed the cleanup level.

AOI Area of Interest.

SW Sidewall.

B Bottom.

^a Analyzed by EPA Method 8081B.

^b Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

Table 39
Soil Analytical Data: Maintenance Compound Area
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample ID	Sample Depth (feet)	Sample Date	Dieldrin ^a	GRO ^b	DRO ^c	ORO ^c
EX-1-B-1:3	3	10/29/2019	--	<5	<50	<250
EX-1-SW-1:1.5	1.5	10/29/2019	--	<5	<50	<250
EX-1-SW-2:1.5	1.5	10/29/2019	--	<5	<50	<250
EX-1-SW-3:1.5	1.5	10/29/2019	--	<5	110	<250
EX-1-SW-4:1.5	1.5	10/29/2019	--	<5	<50	<250
EX-2-B-1:3	3	10/29/2019	<0.01	--	<50	<250
EX-2-SW-1:1.5	1.5	10/29/2019	<0.01	--	<50	<250
EX-2-SW-2:1.5	1.5	10/29/2019	<0.01	--	<50	<250
EX-2-SW-3:1.5	1.5	10/29/2019	<0.01	--	<50	<250
EX-2-SW-4:1.5	1.5	10/29/2019	<0.01	--	<50	<250
Soil Cleanup Level			0.0625^c	100^d	2,000^d	2,000^d

Notes:

All results presented in milligrams per kilogram (mg/kg).

Bold Bold results exceed the laboratory reporting limit.

-- Sample was not analyzed for this compound.

EX Excavation.

a Analyzed by EPA Method 8081B.

b Analyzed by NWTPH-Gx.

c Analyzed by NWTPH-Dx.

d Based on Model Toxics Control Act (MTCA) Method B Cancer Soil Cleanup Level; Cleanup Levels and Risk Calculations (CLARC) Database.

e MTCA Method A Soil Cleanup Level for Unrestricted Land Uses taken from Table 740-1 of Washington Administrative Code Chapter 170-340-900.

Compounds:

GRO Gasoline-range organics

DRO Diesel-range organics

ORO Oil-range organics

Table 40
Groundwater Analytical Results
Cleanup Action Report
Brookdale Golf Course
1802 Brookdale Road East, Tacoma, Washington

Sample Location	Sample Date	Dieldrin ^a
MW-1	3/17/2021	<0.1
	6/2/2021	<0.1
	9/29/2021	<0.1
MW-2	3/17/2021	<0.1
	6/2/2021	<0.1
	9/29/2021	<0.1
MW-3	3/17/2021	<0.1
	6/2/2021	<0.1
	9/29/2021	<0.1
MW-4	3/17/2021	<0.1
	6/2/2021	<0.1
	9/29/2021	<0.1
MW-5	3/17/2021	<0.1
	6/2/2021	<0.1
	9/29/2021	<0.1
MTCA Method B Groundwater Cleanup Level^b		0.0055

Notes:

All results presented in micrograms per liter (µg/L).

a Analyzed by EPA Method EPA 8081B.

b Model Toxics Control Act (MTCA) Method B Groundwater Cleanup Levels from Cleanup Levels and Risk Calculations (CLARC) spreadsheet. Where cleanup levels based on carcinogenic and non-carcinogenic risk were available, the lower value is listed.

Figures

FIGURE 2
SITE REPRESENTATION
SHOWING REMEDIAL
EXCAVATION AREAS

REPORT

CLEANUP ACTION REPORT

LOCATION

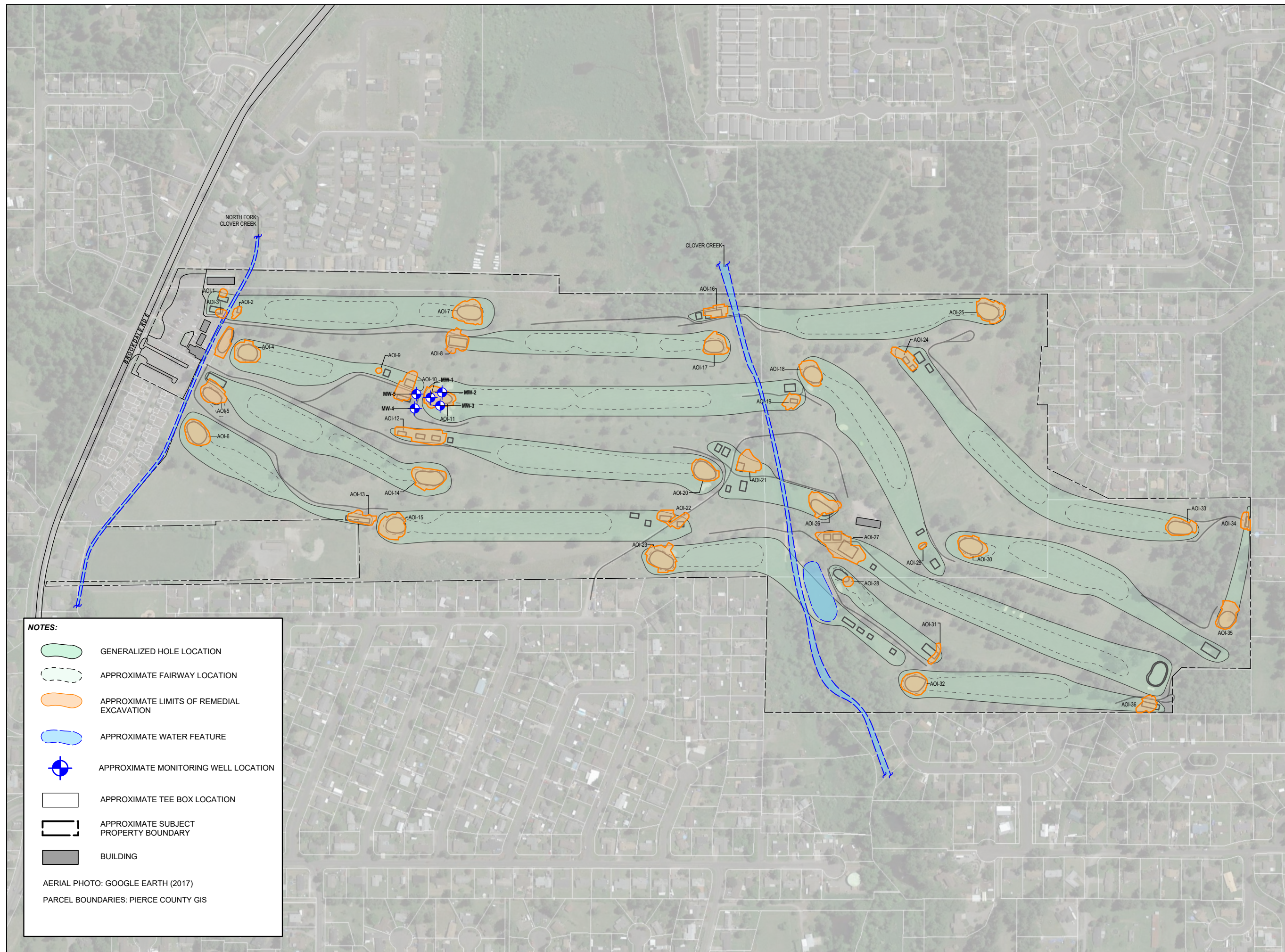
1802 BROOKDALE ROAD EAST
TACOMA, WASHINGTON

PREPARED FOR









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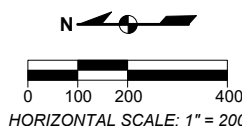
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NOTES:

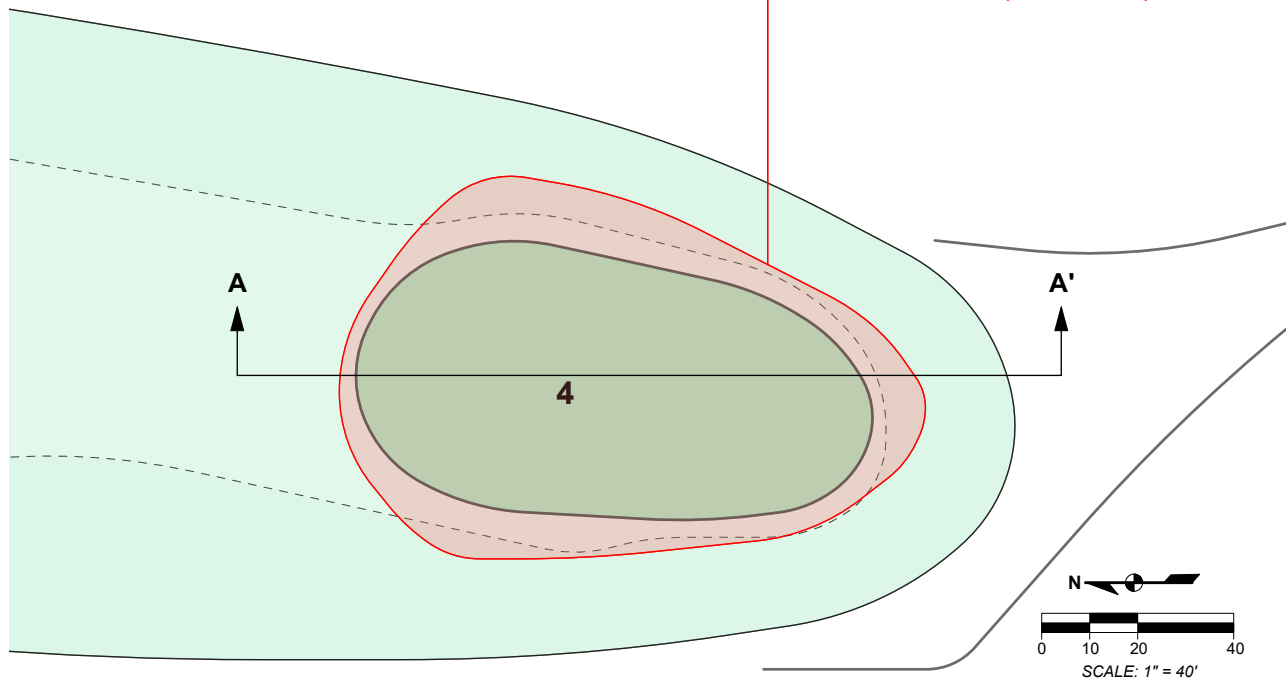
-  GENERALIZED HOLE LOCATION
-  APPROXIMATE FAIRWAY LOCATION
-  APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
-  APPROXIMATE WATER FEATURE
-  APPROXIMATE MONITORING WELL LOCATION
-  APPROXIMATE TEE BOX LOCATION
-  APPROXIMATE SUBJECT PROPERTY BOUNDARY
-  BUILDING

AERIAL PHOTO: GOOGLE EARTH (2017)
PARCEL BOUNDARIES: PIERCE COUNTY GIS

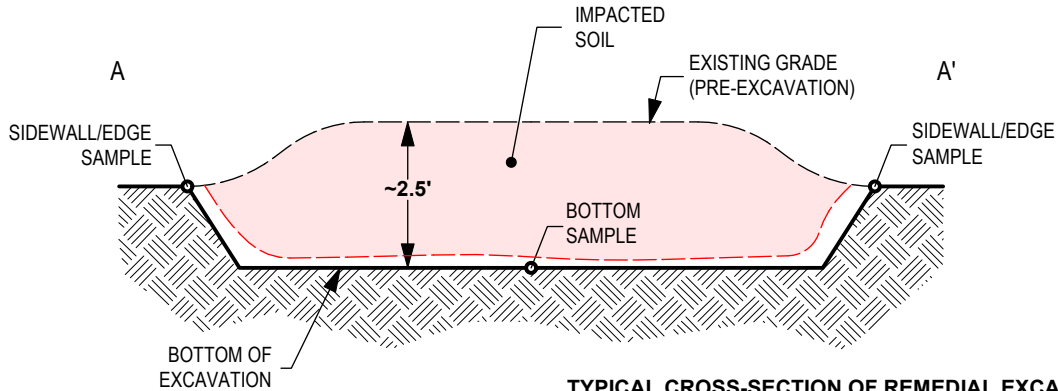


DATE 6/22/22
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AOI-33
7,239.17 - FT² (SURFACE AREA)
319.83 - FT (PERIMETER)



TYPICAL AREA OF IMPACT (PLAN VIEW)



TYPICAL CROSS-SECTION OF REMEDIAL EXCAVATION
NOT TO SCALE

NOTES:

- A A' CROSS-SECTION INDICATOR
- INFERRED AREA OF SOIL WITH DIELDRIN CONCENTRATIONS EXCEEDING THE CLEANUP LEVEL
- AOI-33
7,239.17 - FT²
319.83 - FT
- AREA OF IMPACT (AOI) AND DESIGNATION NUMBER
- APPROXIMATE SURFACE AREA IN SQUARE FEET (FT²)
- APPROXIMATE PERIMETER LENGTH IN LINEAR FEET (FT)
- GENERALIZED HOLE LOCATION
- APPROXIMATE FAIRWAY LOCATION
- APPROXIMATE GREEN LOCATION WITH HOLE NUMBER
- CART PATH



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FIGURE 3
TYPICAL CROSS-SECTION OF
REMEDIAL EXCAVATION

REPORT
CLEANUP ACTION PLAN

PREPARED FOR
ICHIJO USA CO., LTD

LOCATION
1802 BROOKDALE RD EAST
TACOMA, WASHINGTON

PROJECT NUMBER
430733.0000.0000

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REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES

The map displays a site with a green background representing the former golf course hole. A large, irregularly shaped area is outlined in orange, indicating the approximate limits of remedial excavation. This area is divided into two sections: a larger, lighter orange section at the top and a smaller, darker orange section at the bottom. A hatched rectangular area, representing the former golf course tee box, is located within the darker orange section. Several sample locations are marked with black dots and labeled: AOI-1-SW-20.5 DUP-73 (top right), AOI-1-SW-10.5 (top left), AOI-1-B-11 (center), AOI-1-SW-30.5 (right), and AOI-1-SW-40.5 (bottom center). A callout box points to the orange outline with the text 'APPROXIMATE AREA EXCAVATED: 894.53 FT²'. A north arrow and a scale bar (1 inch = 10 feet) are located in the bottom left corner.

APPROXIMATE AREA EXCAVATED: 894.53 FT²

NOTES:

- APPROXIMATE SAMPLE LOCATION
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- ▨ FORMER GOLF COURSE TEE BOX
- FORMER GOLF COURSE HOLE

10 5 0 10

APPROXIMATE SCALE : 1" = 10'

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES

APPROXIMATE AREA EXCAVATED: 894.53 FT²

AOI-1-SW-20.5
DUP-73

AOI-1-SW-10.5

AOI-1-B-1:1

AOI-1-SW-30.5

AOI-1-SW-40.5

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FIGURE 4
REMEDIAL EXCAVATION - AOI-1

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CLEANUP ACTION REPORT

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FIGURE 4
REMEDIAL EXCAVATION - AOI-1

REPORT

CLEANUP ACTION REPORT

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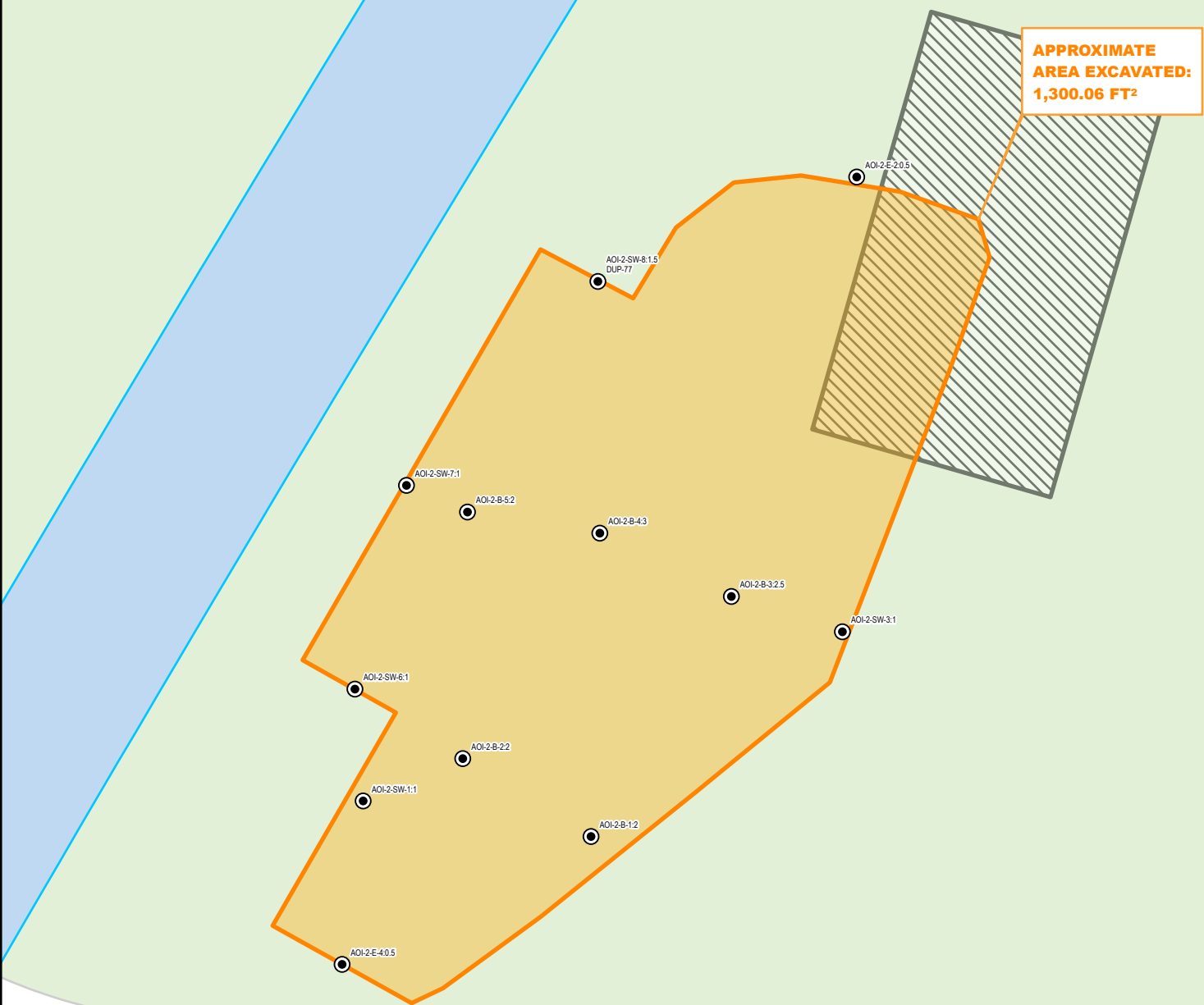
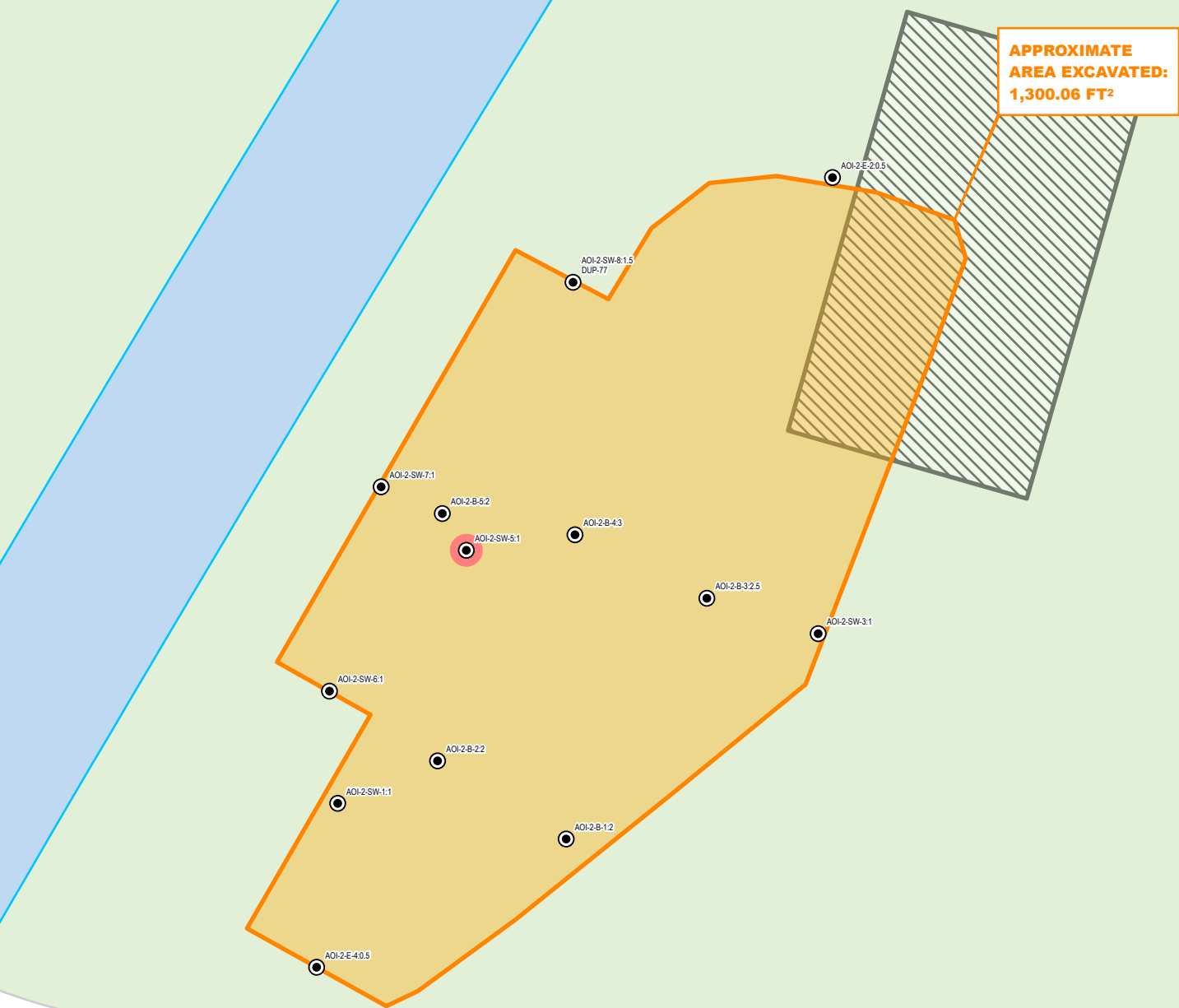
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REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



NOTES:

- APPROXIMATE SAMPLE LOCATION
- INDICATES DIELDRIN DETECTED IN PERFORMANCE SAMPLE AT CONCENTRATION GREATER THAN MTCA METHOD B (CANCER) SOIL CLEANUP LEVEL (0.0625 mg/kg)
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- ▨ FORMER GOLF COURSE TEE BOX
- FORMER GOLF COURSE HOLE

10 5 0 10

APPROXIMATE SCALE : 1" = 10'

TRC

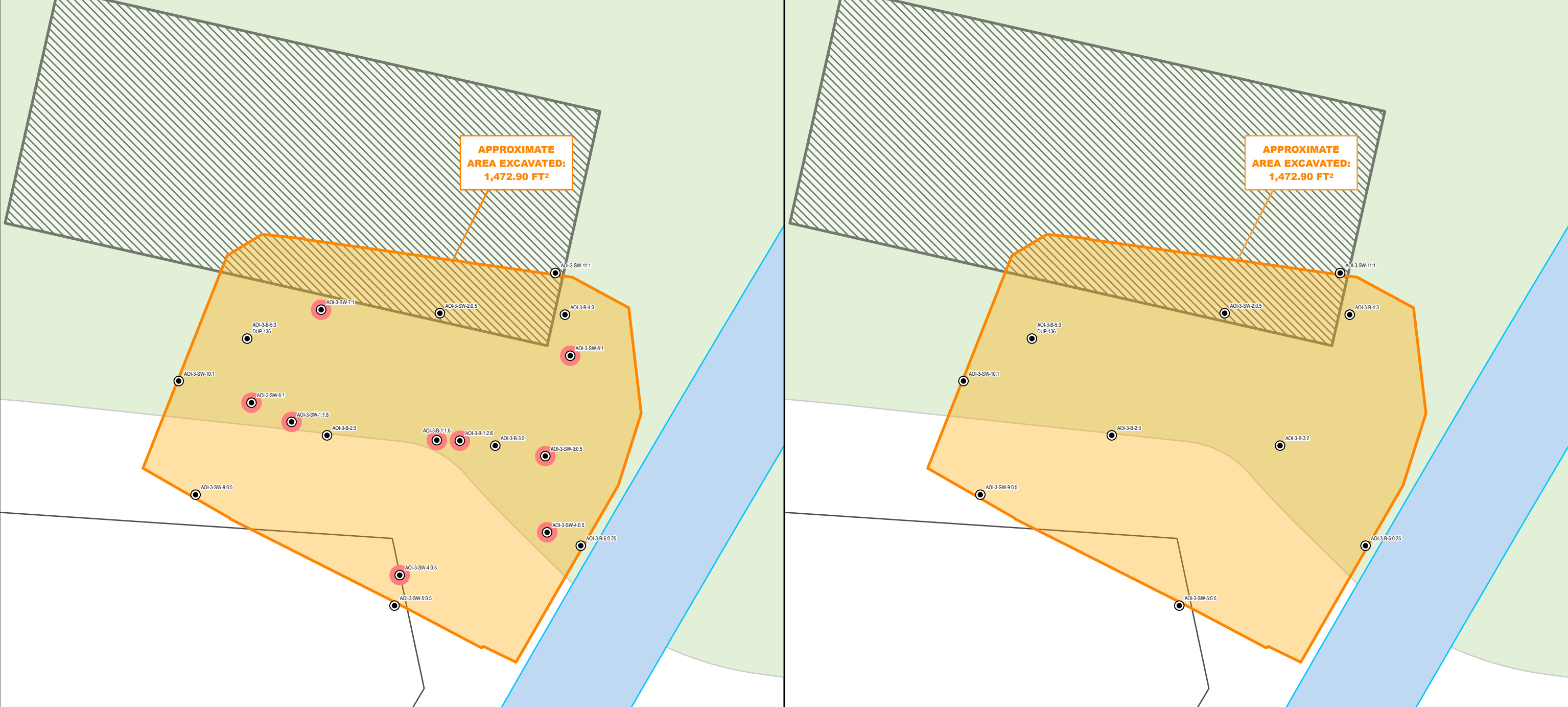
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FIGURE 5
REMEDIAL EXCAVATION - AOI-2

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	PROJECT NUMBER 430733.0000.0000
LOCATION 1802 BROOKDALE ROAD EAST TACOMA, WASHINGTON	DATE 6/22/22 DRAWN BY KPC REVIEWED BY ND

REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



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FIGURE 6
REMEDIAL EXCAVATION - AOI-3

REPORT
CLEANUP ACTION REPORT

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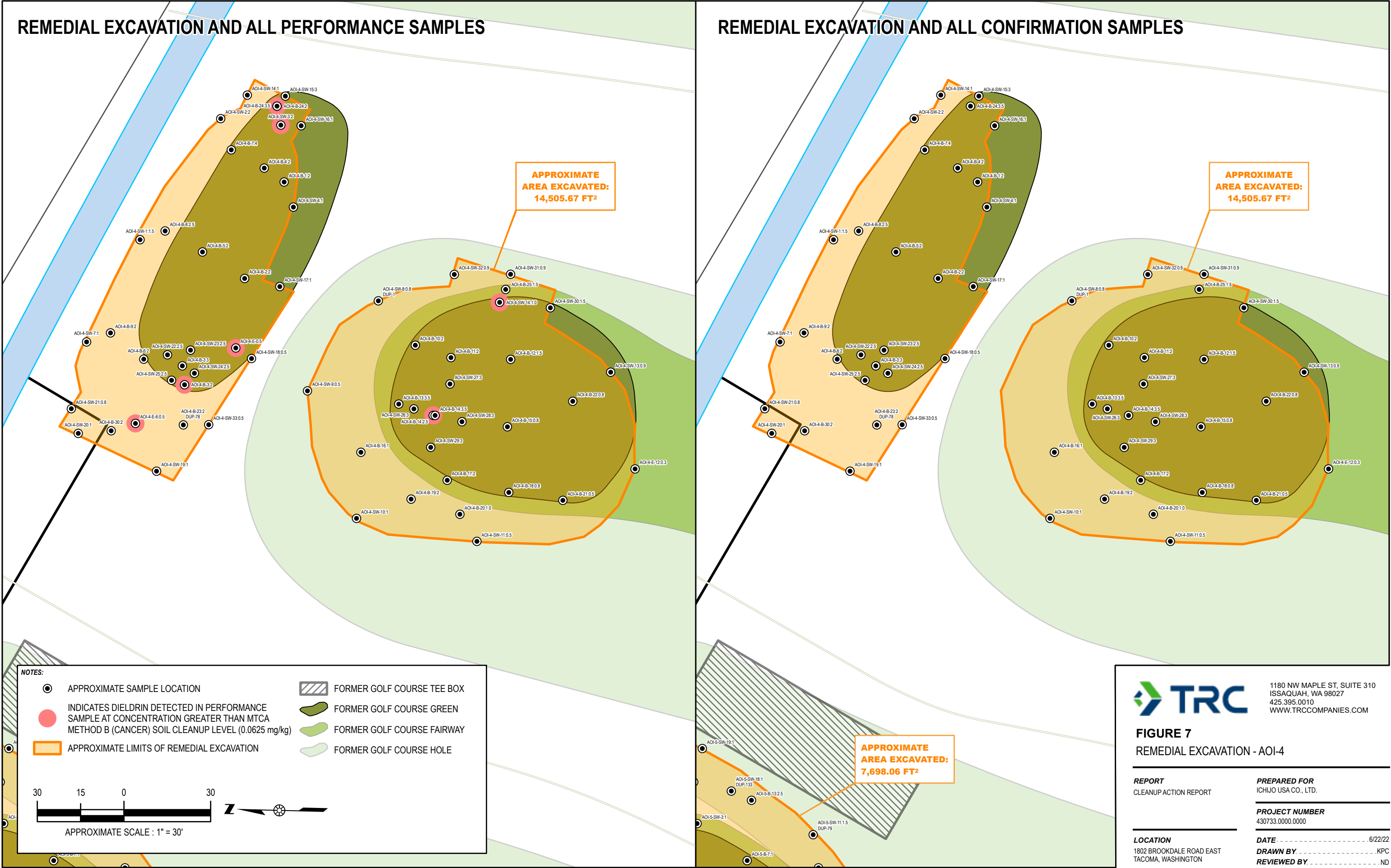
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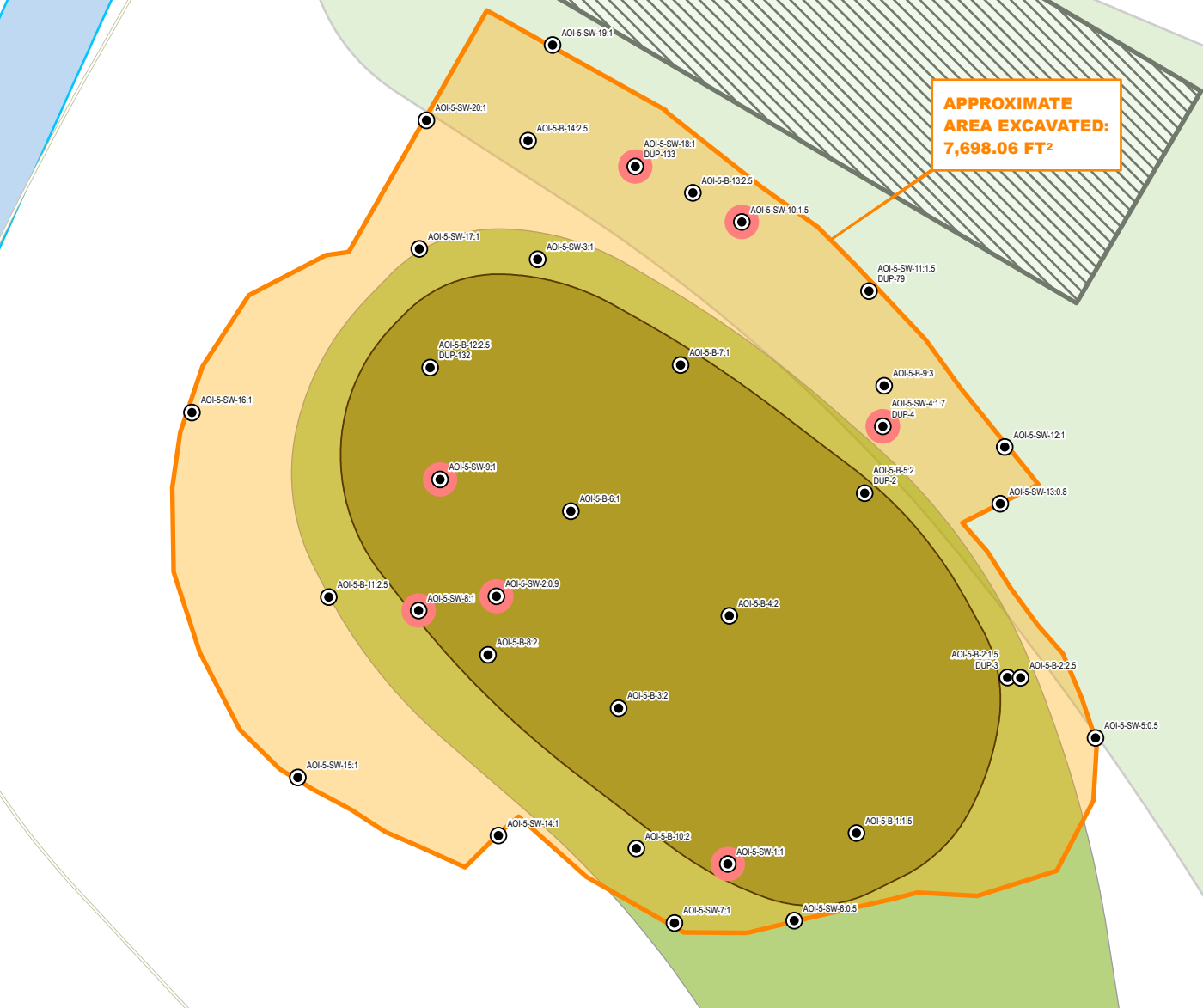
REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



NOTES:

- APPROXIMATE SAMPLE LOCATION
- INDICATES DIELDRIN DETECTED IN PERFORMANCE SAMPLE AT CONCENTRATION GREATER THAN MTCA METHOD B (CANCER) SOIL CLEANUP LEVEL (0.0625 mg/kg)
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- ▨ FORMER GOLF COURSE TEE BOX
- FORMER GOLF COURSE GREEN
- FORMER GOLF COURSE FAIRWAY
- FORMER GOLF COURSE HOLE

20 10 0 20

APPROXIMATE SCALE : 1" = 20'



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FIGURE 8
REMEDIAL EXCAVATION - AOI-5

REPORT
CLEANUP ACTION REPORT

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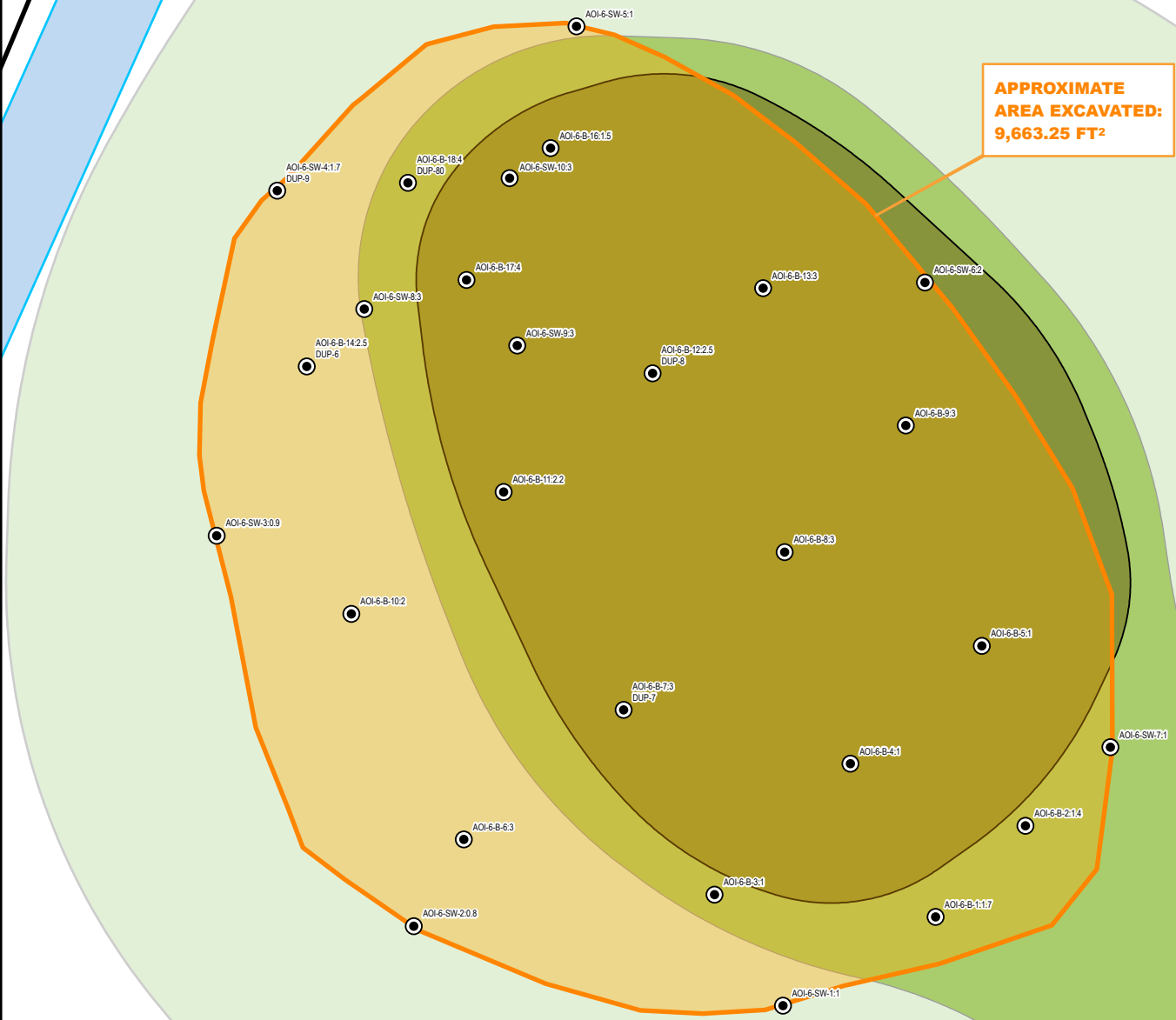
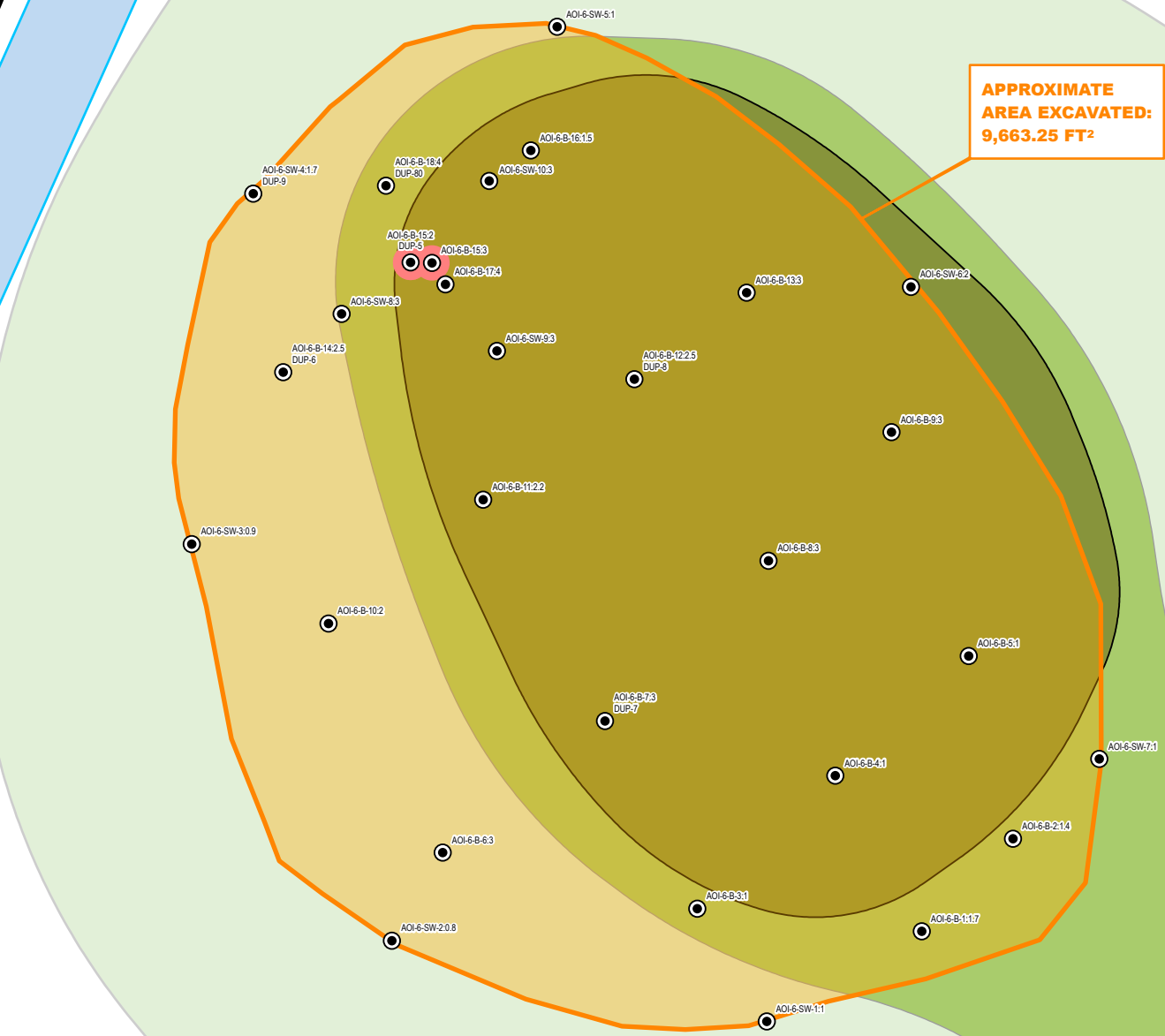
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LOCATION
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REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



NOTES:

- APPROXIMATE SAMPLE LOCATION
- INDICATES DIELDRIN DETECTED IN PERFORMANCE SAMPLE AT CONCENTRATION GREATER THAN MTCA METHOD B (CANCER) SOIL CLEANUP LEVEL (0.0625 mg/kg)
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- FORMER GOLF COURSE GREEN
- FORMER GOLF COURSE FAIRWAY
- FORMER GOLF COURSE HOLE

20 10 0 20

APPROXIMATE SCALE : 1" = 20'



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FIGURE 9
REMEDIAL EXCAVATION - AOI-6

REPORT
CLEANUP ACTION REPORT

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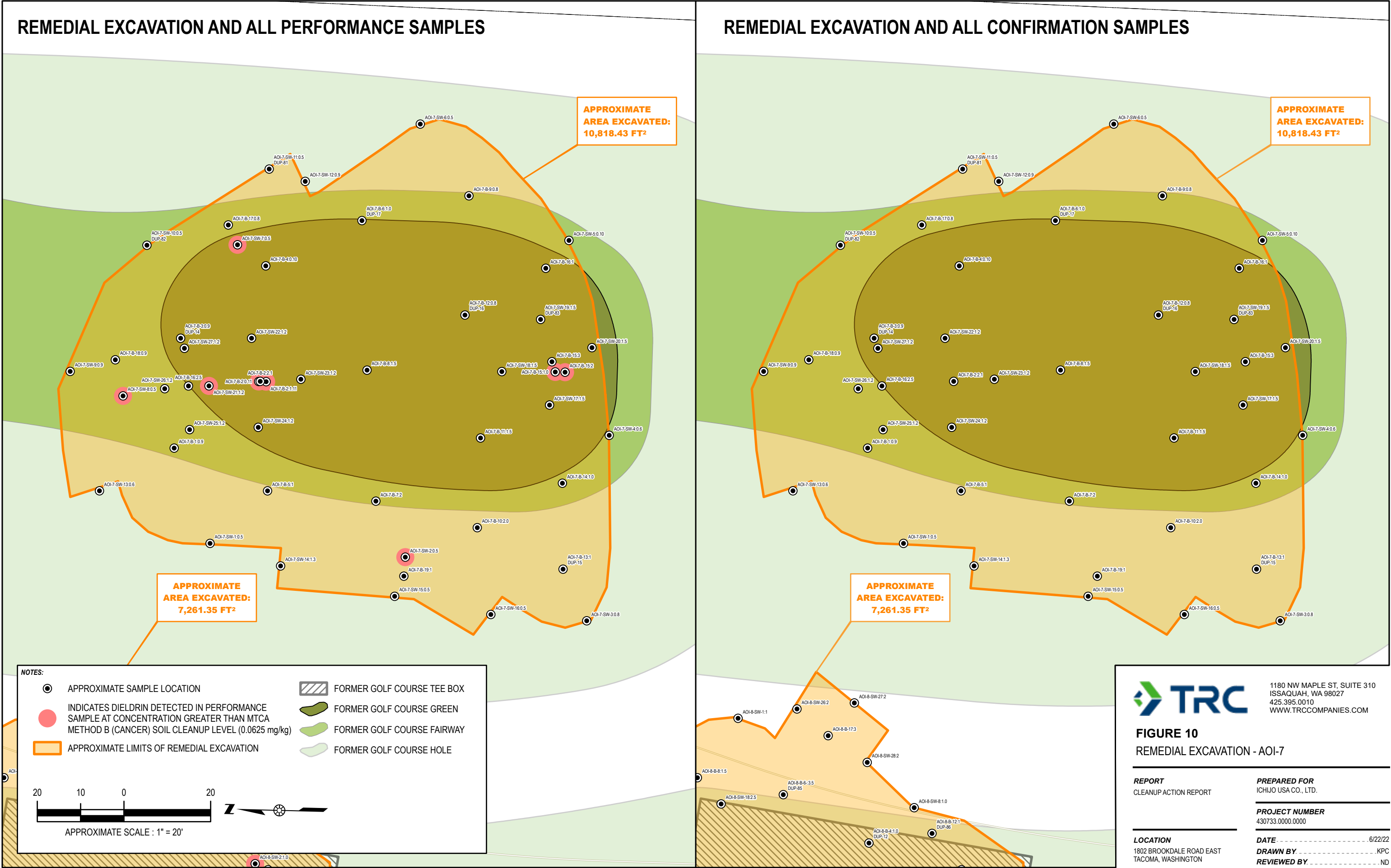
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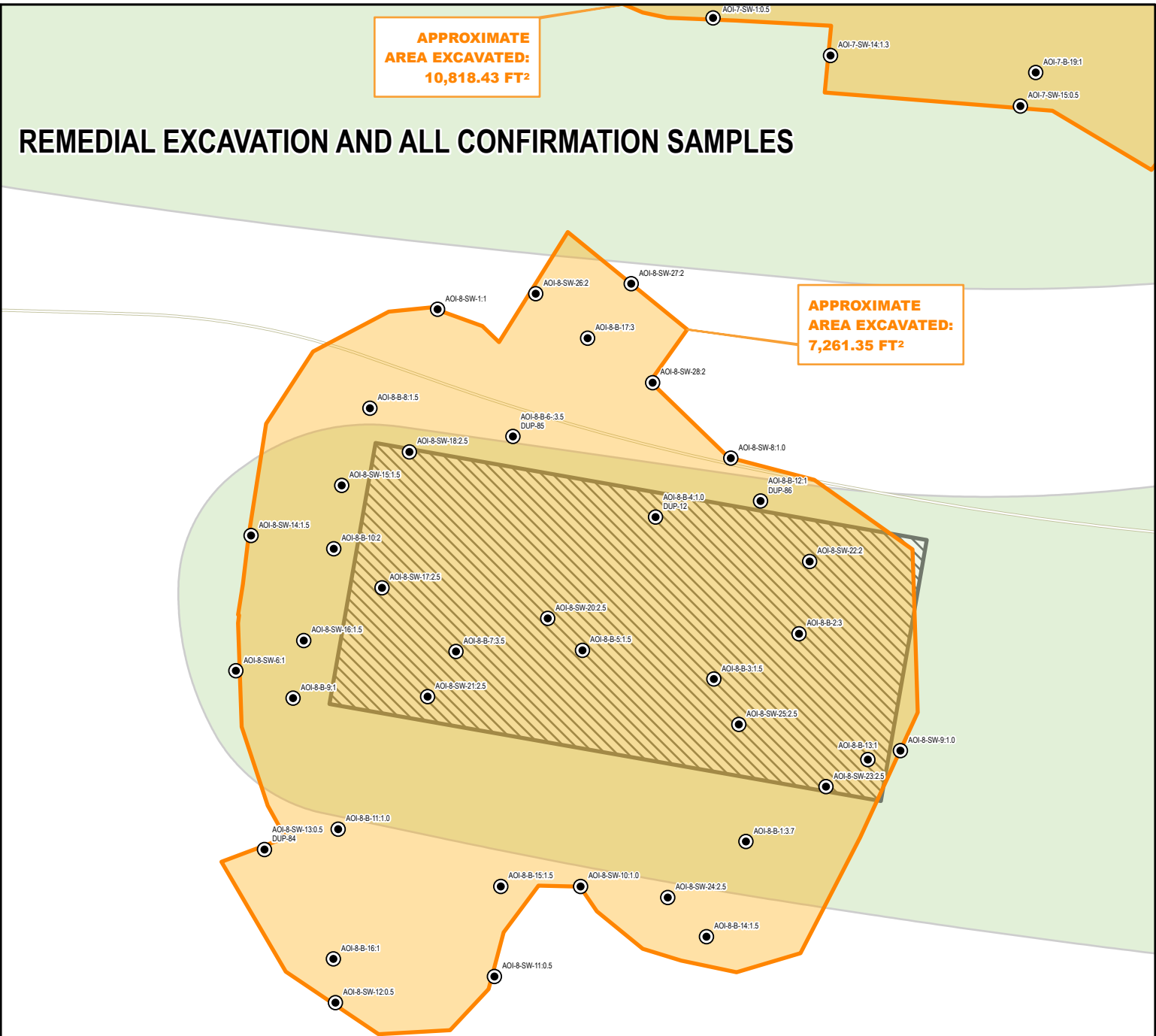
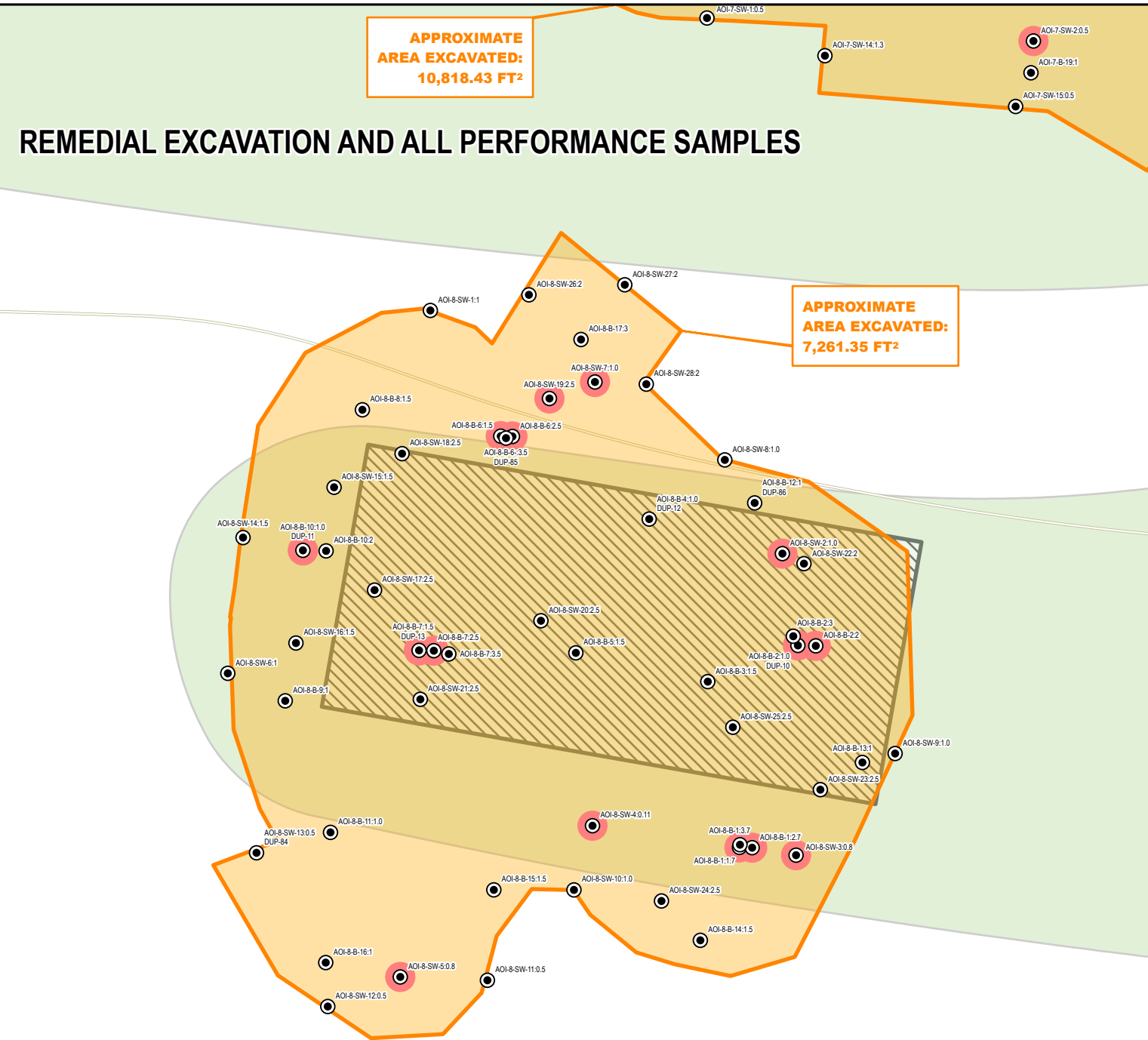
LOCATION
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REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES





NOTES:

- APPROXIMATE SAMPLE LOCATION
- INDICATES DIELDRIN DETECTED IN PERFORMANCE SAMPLE AT CONCENTRATION GREATER THAN MTCA METHOD B (CANCER) SOIL CLEANUP LEVEL (0.0625 mg/kg)
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- ▨ FORMER GOLF COURSE TEE BOX
- FORMER GOLF COURSE HOLE

20 10 0 20

APPROXIMATE SCALE : 1" = 20'



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FIGURE 11
REMEDIAL EXCAVATION - AOI-8

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CLEANUP ACTION REPORT

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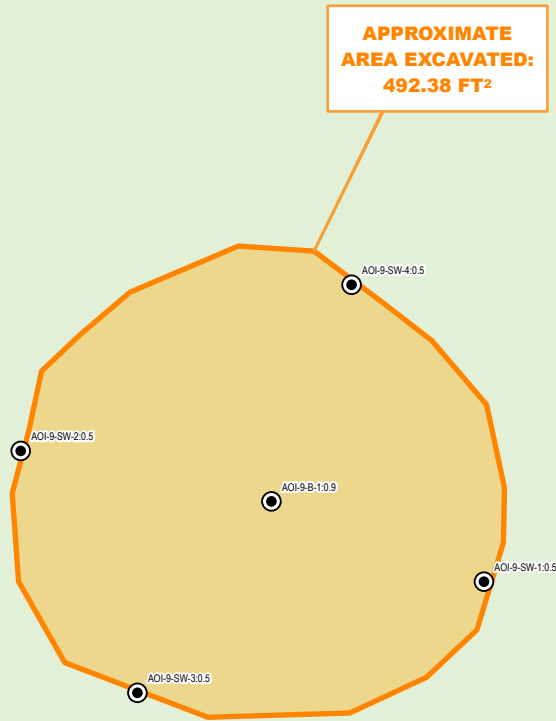
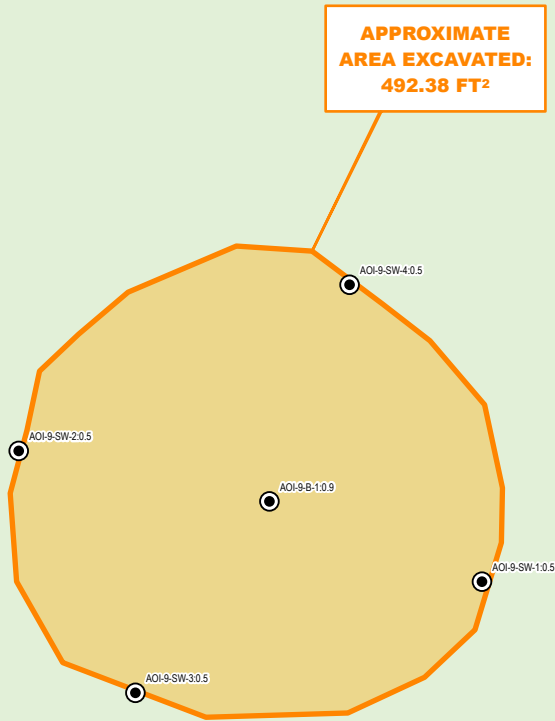
PROJECT NUMBER
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LOCATION
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REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



NOTES:

- APPROXIMATE SAMPLE LOCATION
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- ▨ FORMER GOLF COURSE TEE BOX
- FORMER GOLF COURSE HOLE

10 5 0 10

APPROXIMATE SCALE : 1" = 10'

North Arrow



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FIGURE 12
REMEDIAL EXCAVATION - AOI-9

REPORT
CLEANUP ACTION REPORT

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PROJECT NUMBER
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LOCATION
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REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES



NOTES:

- APPROXIMATE SAMPLE LOCATION
- INDICATES DIELDRIN DETECTED IN PERFORMANCE SAMPLE AT CONCENTRATION GREATER THAN MTCA METHOD B (CANCER) SOIL CLEANUP LEVEL (0.0625 mg/kg)
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- ▨ FORMER GOLF COURSE TEE BOX
- FORMER GOLF COURSE HOLE

20 10 0 20

APPROXIMATE SCALE : 1" = 20'

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



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FIGURE 13
REMEDIAL EXCAVATION - AOI-10

REPORT
CLEANUP ACTION REPORT

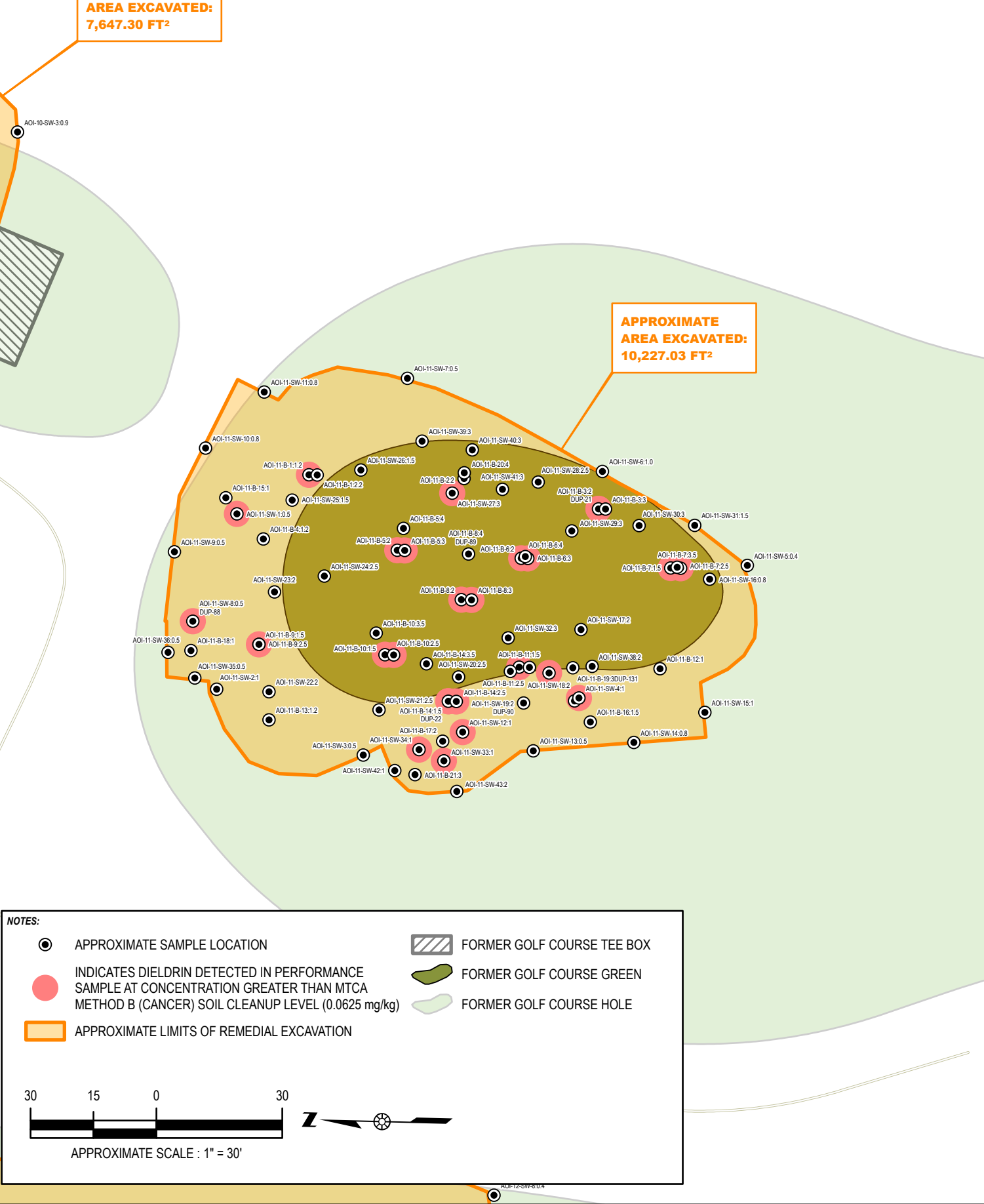
PREPARED FOR
ICHIJO USA CO., LTD.

PROJECT NUMBER
430733.0000.0000

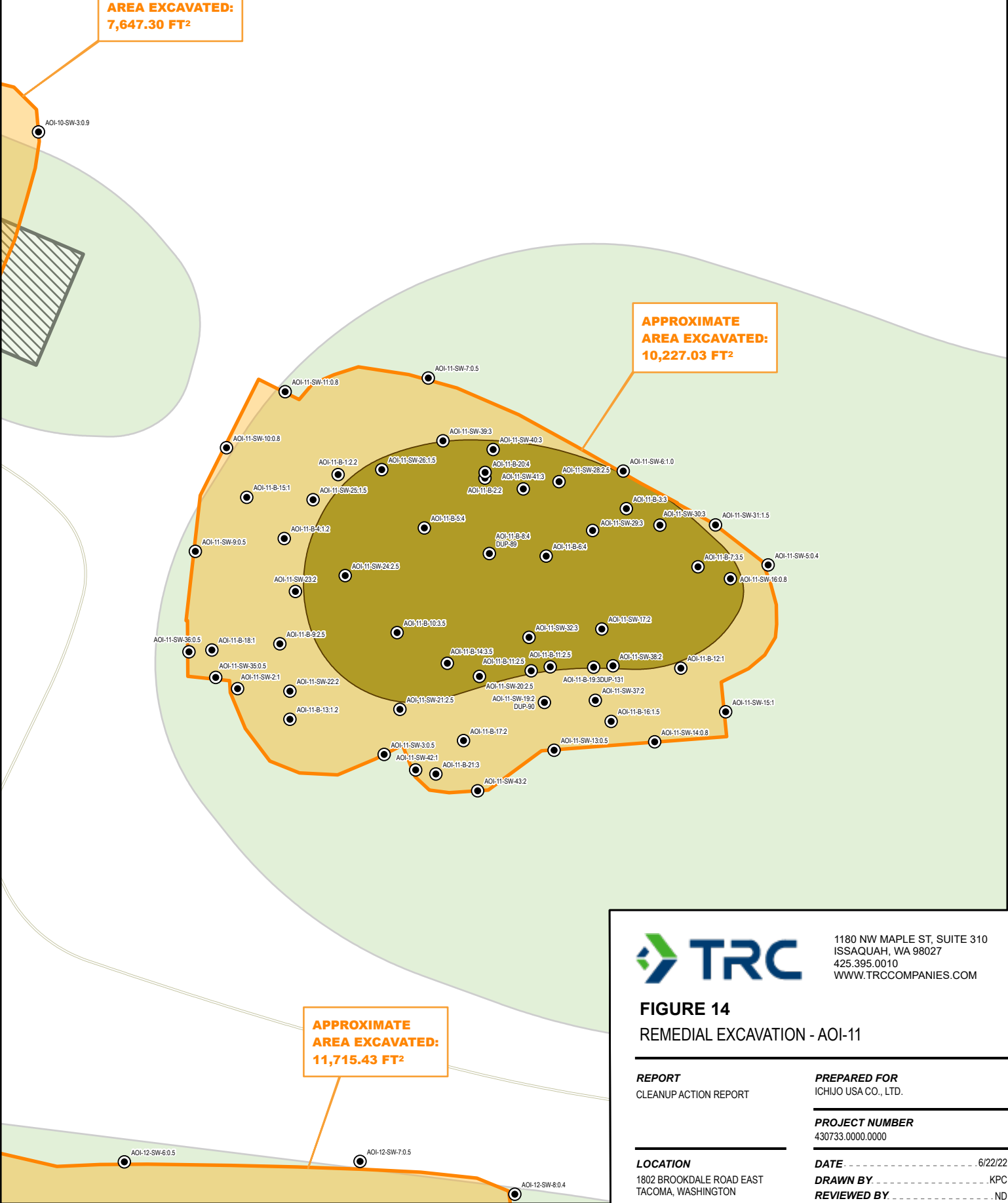
LOCATION
1802 BROOKDALE ROAD EAST
TACOMA, WASHINGTON

DATE 6/22/22
DRAWN BY KPC
REVIEWED BY ND

REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES



REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



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FIGURE 14
REMEDIAL EXCAVATION - AOI-11

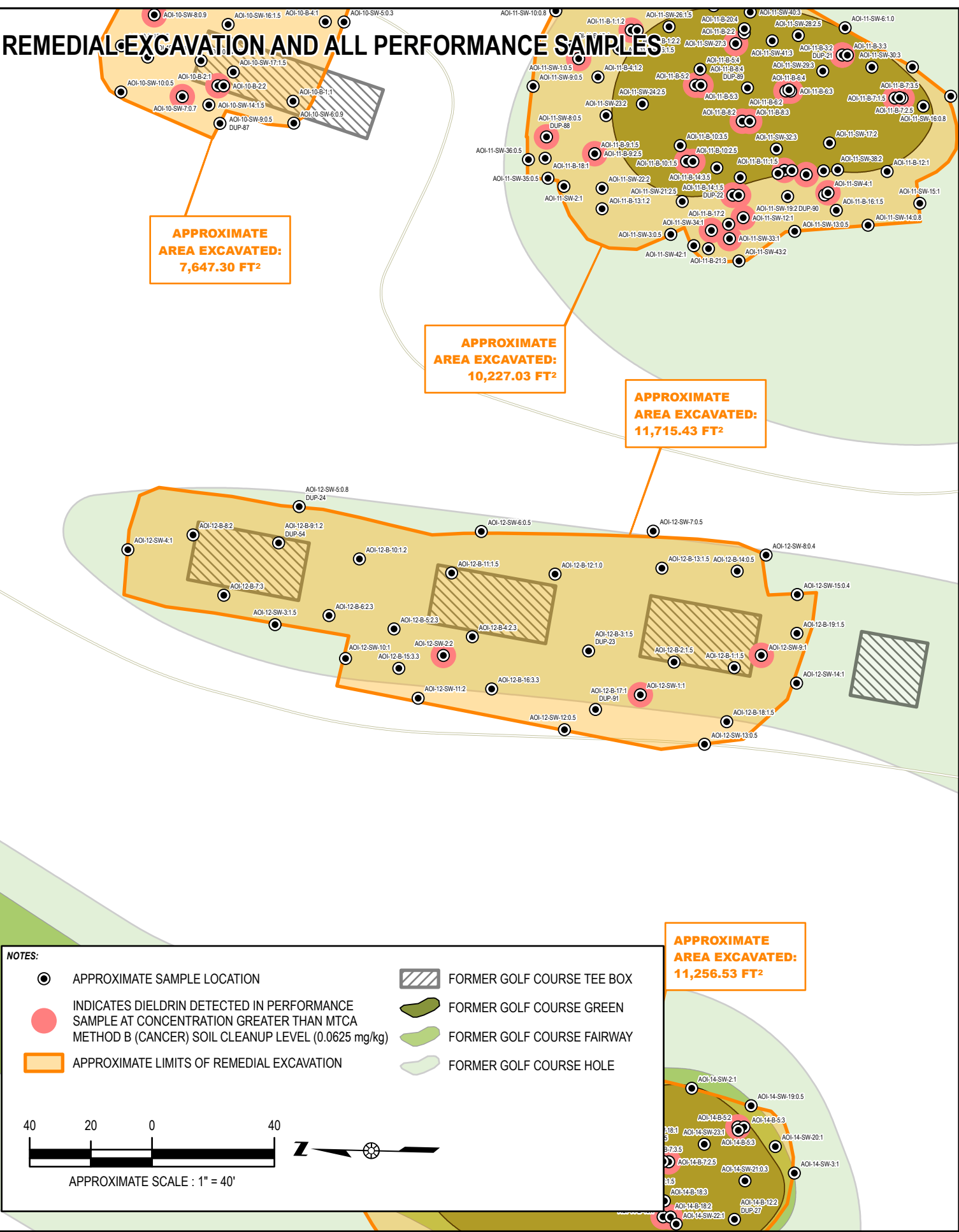
REPORT
CLEANUP ACTION REPORT

PREPARED FOR
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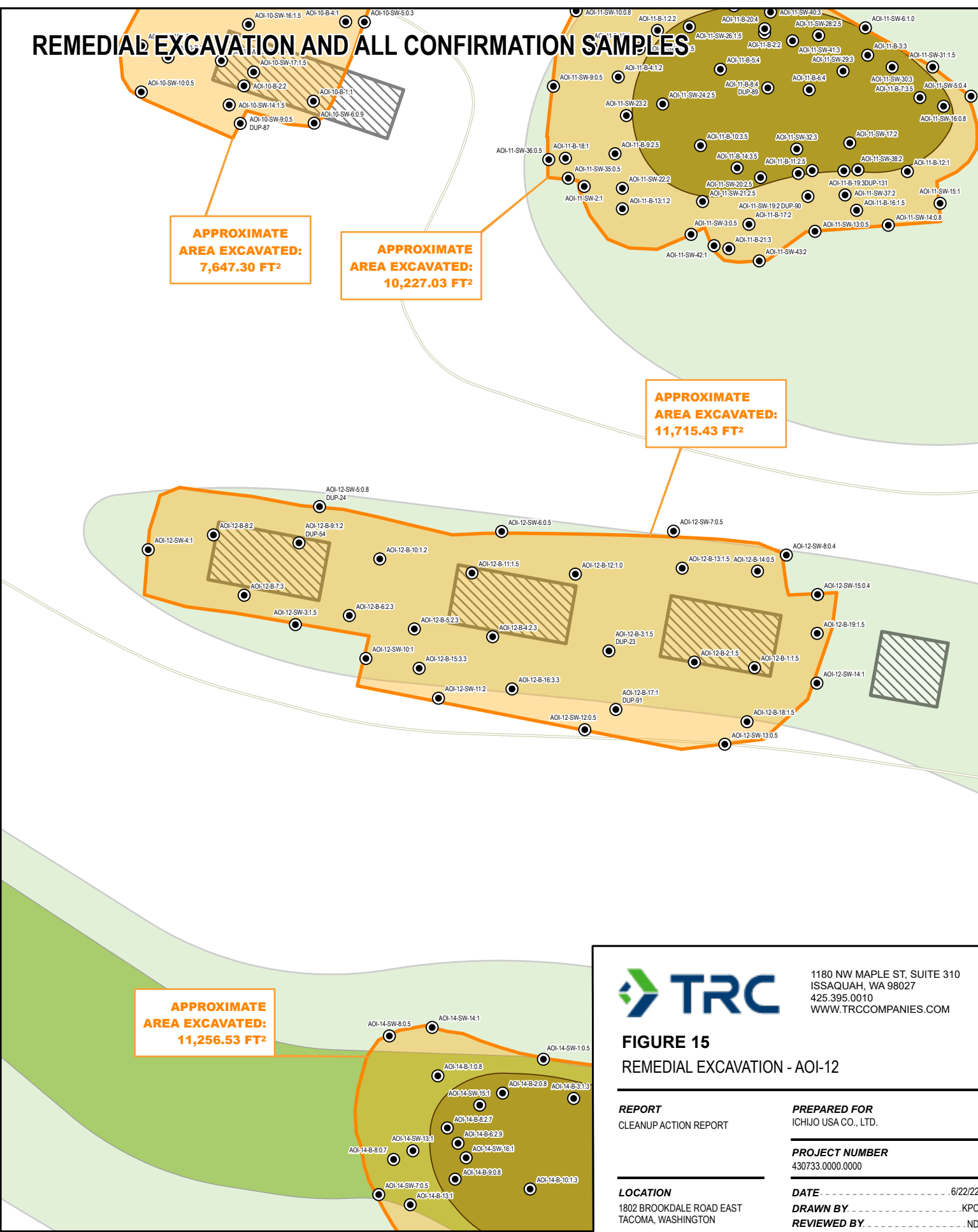
LOCATION
1802 BROOKDALE ROAD EAST
TACOMA, WASHINGTON

PROJECT NUMBER
430733.0000.0000
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ND

REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES



REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



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FIGURE 15
REMEDIAL EXCAVATION - AOI-12

REPORT
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LOCATION
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TACOMA, WASHINGTON

PROJECT NUMBER
430733.0000.0000

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REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES

REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES

APPROXIMATE AREA EXCAVATED: 5,063.16 FT²

APPROXIMATE AREA EXCAVATED: 10,562.08 FT²

NOTES:

- APPROXIMATE SAMPLE LOCATION
- INDICATES DIELDRIN DETECTED IN PERFORMANCE SAMPLE AT CONCENTRATION GREATER THAN MTCA METHOD B (CANCER) SOIL CLEANUP LEVEL (0.0625 mg/kg)
- FORMER GOLF COURSE TEE BOX
- FORMER GOLF COURSE HOLE
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION

APPROXIMATE SCALE : 1" = 20'

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES

APPROXIMATE AREA EXCAVATED: 5,063.16 FT²

APPROXIMATE AREA EXCAVATED: 10,562.08 FT²

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FIGURE 16
REMEDIAL EXCAVATION - AOI-13

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FIGURE 16
REMEDIAL EXCAVATION - AOI-13

REPORT

CLEANUP ACTION REPORT

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PROJECT NUMBER
430733.0000.0000

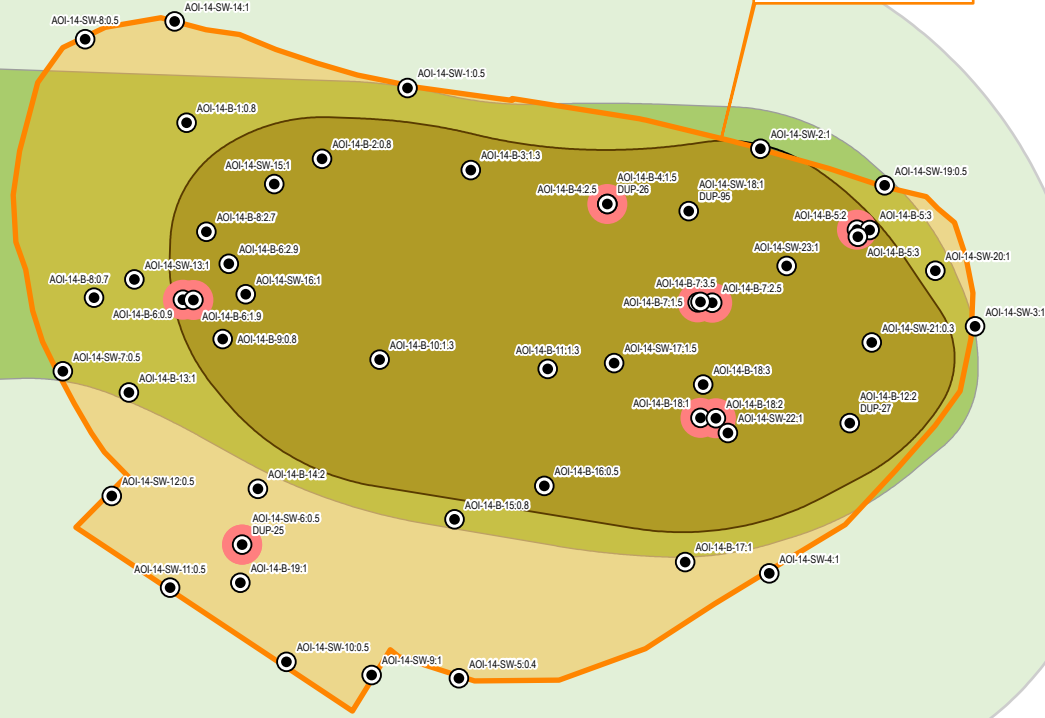
LOCATION
1802 BROOKDALE ROAD EAST
TACOMA, WASHINGTON

DATE 6/22/22
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REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES

APPROXIMATE
AREA EXCAVATED:
11,715.43 FT²

APPROXIMATE
AREA EXCAVATED:
11,256.53 FT²



NOTES:

- APPROXIMATE SAMPLE LOCATION
- INDICATES DIELDRIN DETECTED IN PERFORMANCE SAMPLE AT CONCENTRATION GREATER THAN MTCA METHOD B (CANCER) SOIL CLEANUP LEVEL (0.0625 mg/kg)
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- FORMER GOLF COURSE GREEN
- FORMER GOLF COURSE FAIRWAY
- FORMER GOLF COURSE HOLE

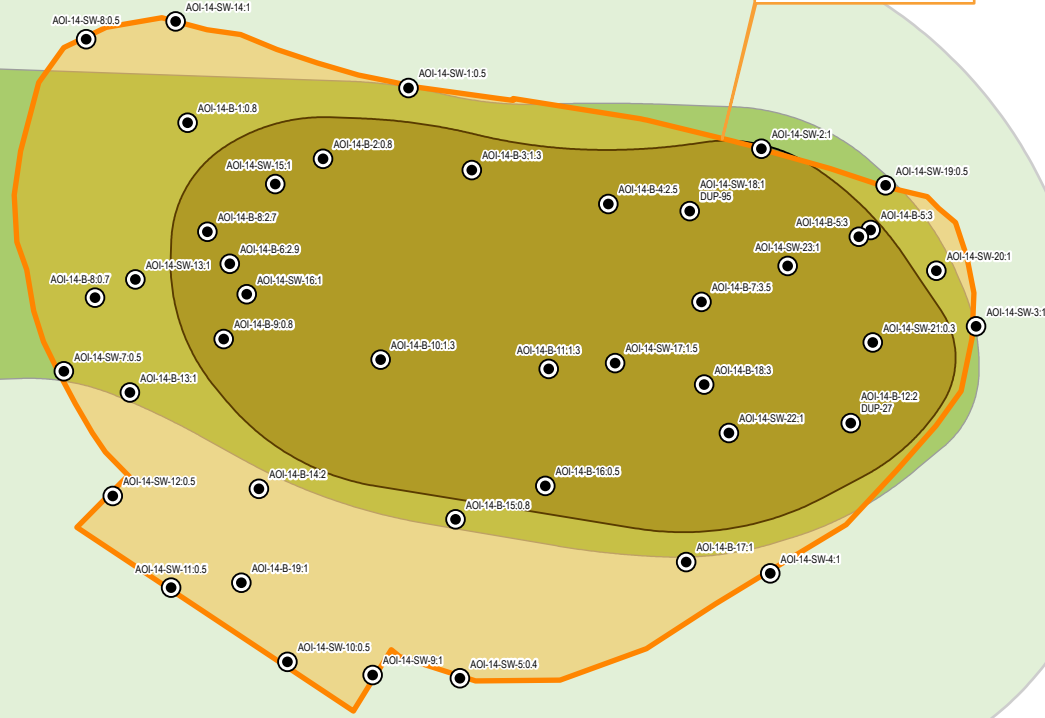
30 15 0 30

APPROXIMATE SCALE : 1" = 30'

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES

APPROXIMATE
AREA EXCAVATED:
11,715.43 FT²

APPROXIMATE
AREA EXCAVATED:
11,256.53 FT²



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FIGURE 17
REMEDIAL EXCAVATION - AOI-14

REPORT
CLEANUP ACTION REPORT

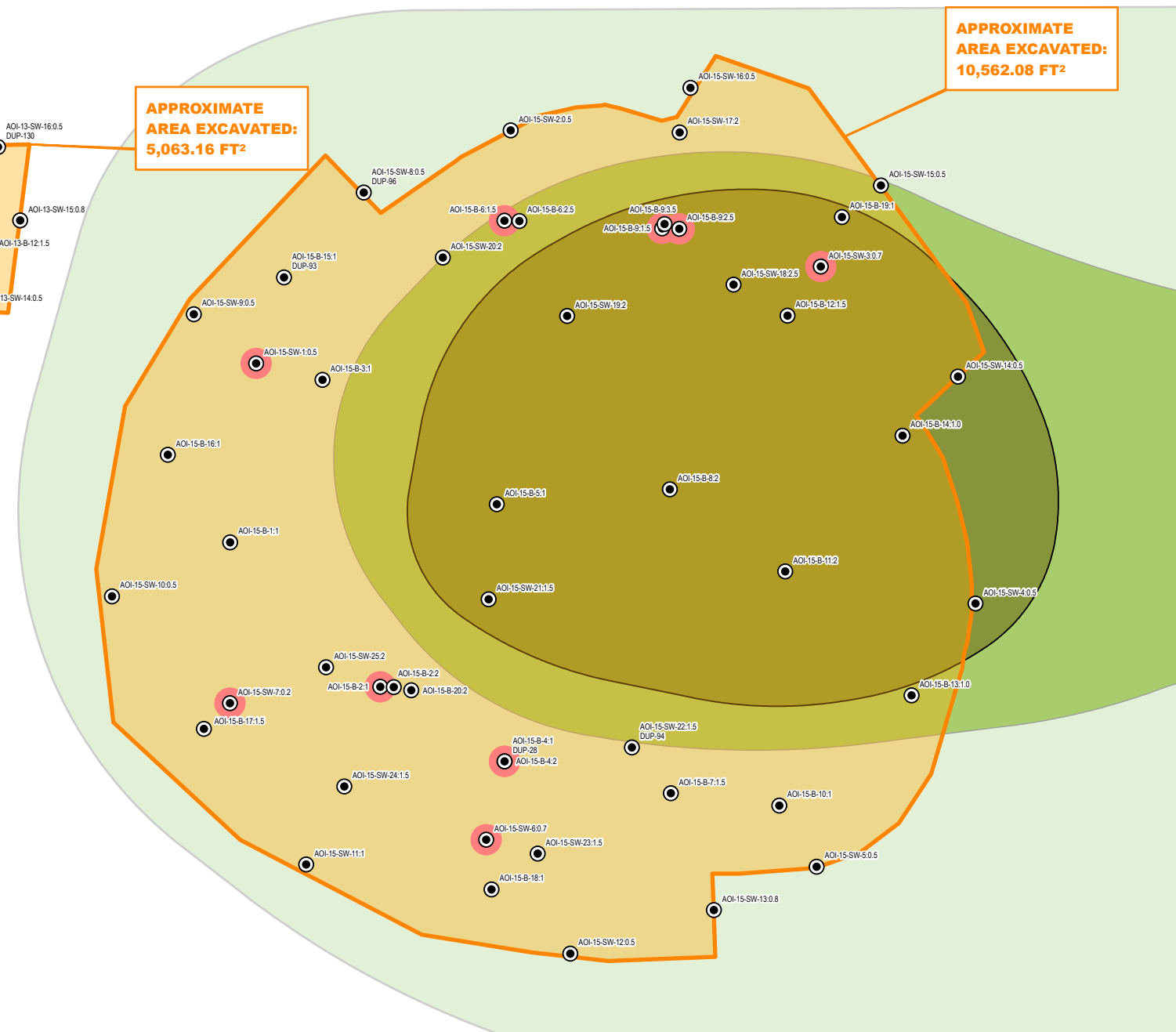
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REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES



APPROXIMATE
AREA EXCAVATED:
10,562.08 FT²

APPROXIMATE
AREA EXCAVATED:
5,063.16 FT²

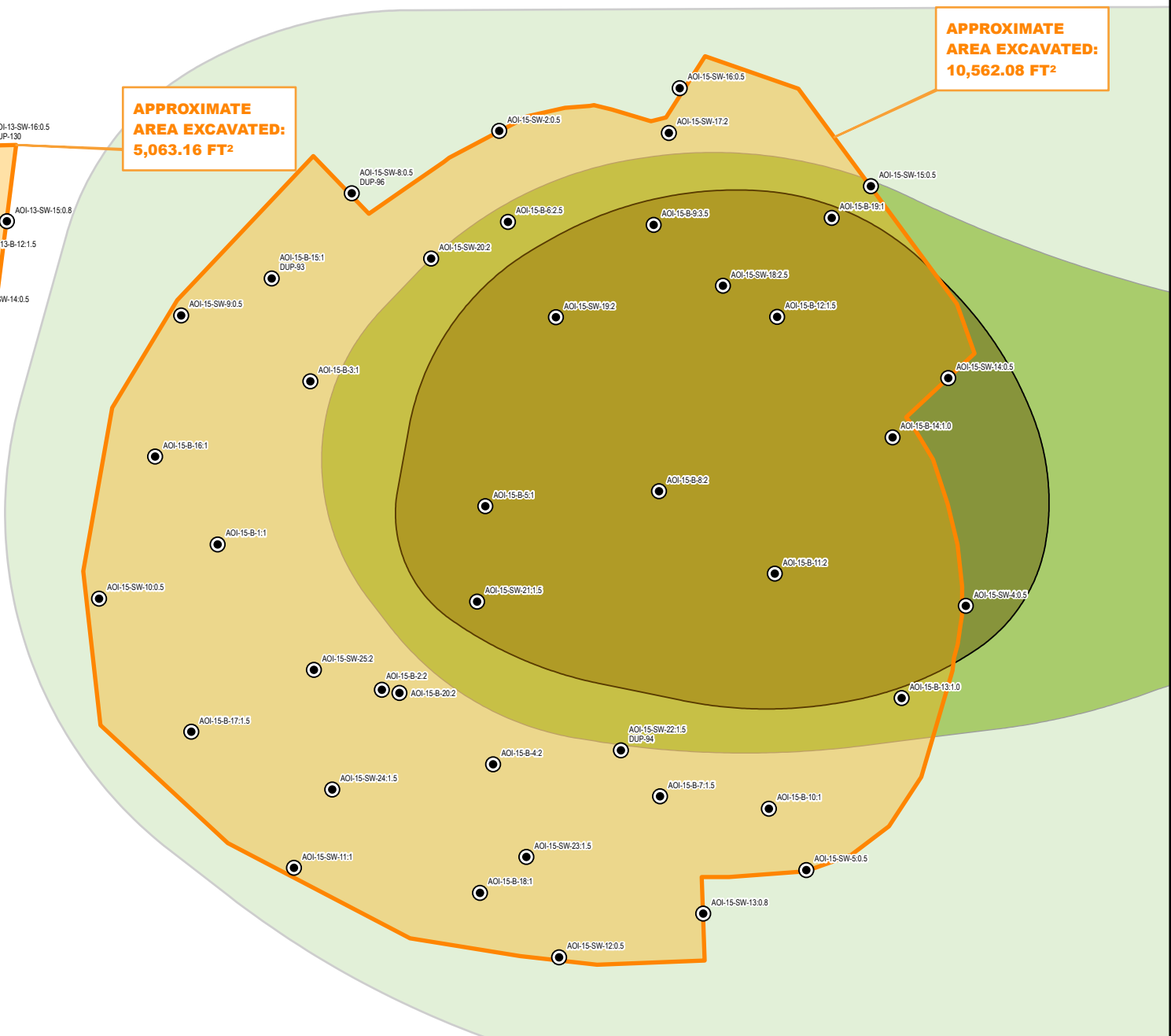
NOTES:

- APPROXIMATE SAMPLE LOCATION
- INDICATES DIELDRIN DETECTED IN PERFORMANCE SAMPLE AT CONCENTRATION GREATER THAN MTCA METHOD B (CANCER) SOIL CLEANUP LEVEL (0.0625 mg/kg)
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- FORMER GOLF COURSE GREEN
- FORMER GOLF COURSE FAIRWAY
- FORMER GOLF COURSE HOLE

20 10 0 20

APPROXIMATE SCALE : 1" = 20'

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



APPROXIMATE
AREA EXCAVATED:
10,562.08 FT²

APPROXIMATE
AREA EXCAVATED:
5,063.16 FT²

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FIGURE 18
REMEDIAL EXCAVATION - AOI-15

REPORT
CLEANUP ACTION REPORT

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PROJECT NUMBER
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LOCATION
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TACOMA, WASHINGTON

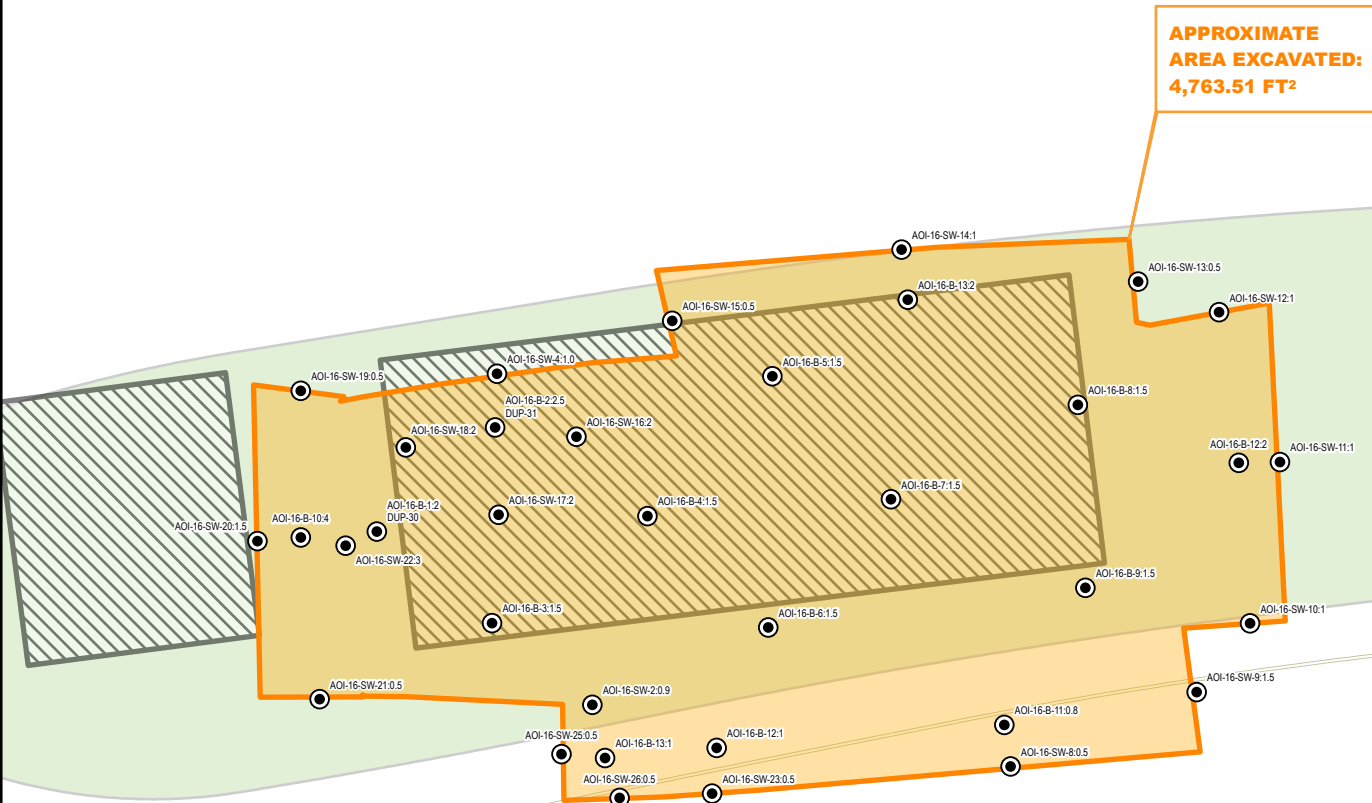
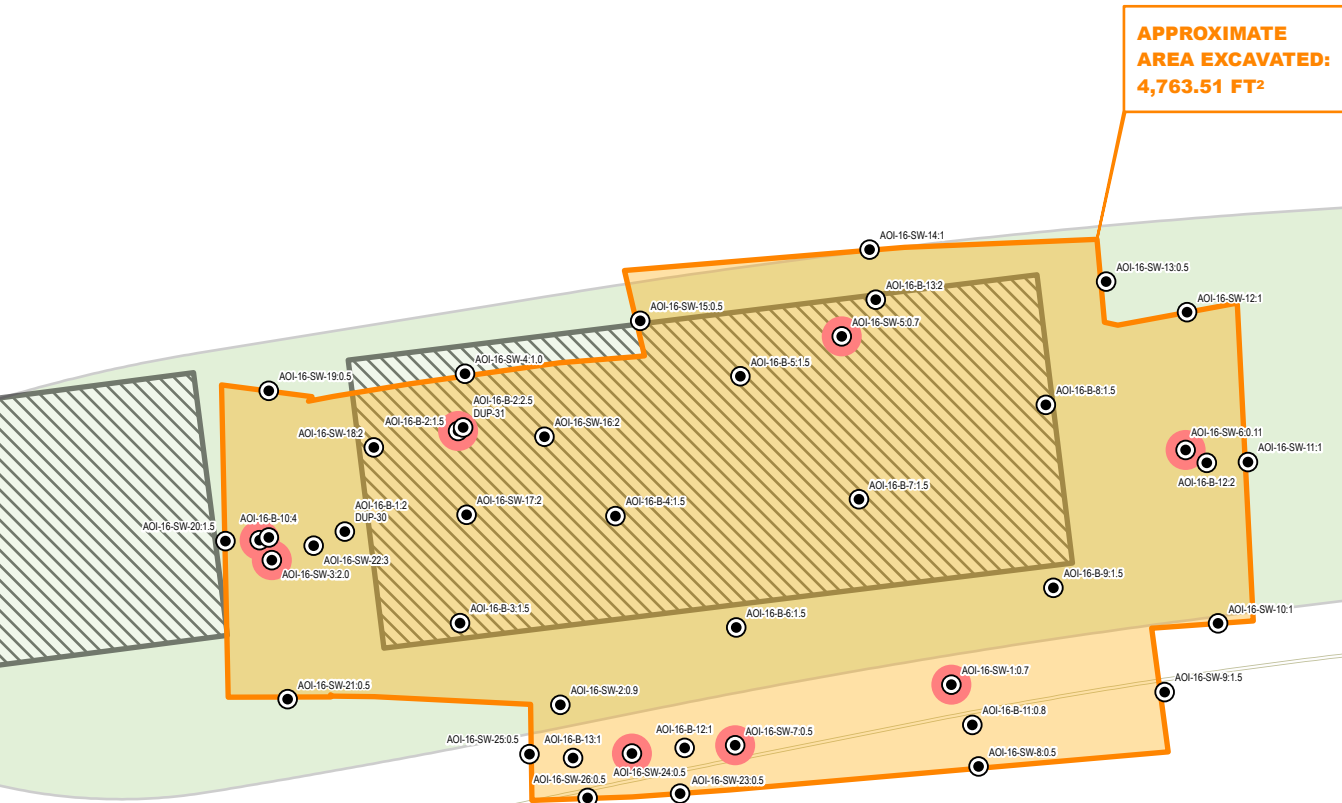
DATE 6/22/22

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REMEDIAL EXCAVATION AND ALL PERFORMANCE-SAMPLES

REMEDIAL EXCAVATION AND ALL CONFIRMATION-SAMPLES



NOTES:

- APPROXIMATE SAMPLE LOCATION
- INDICATES DIELDRIN DETECTED IN PERFORMANCE SAMPLE AT CONCENTRATION GREATER THAN MTCA METHOD B (CANCER) SOIL CLEANUP LEVEL (0.0625 mg/kg)
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- ▨ FORMER GOLF COURSE TEE BOX
- FORMER GOLF COURSE HOLE

20 10 0 20

APPROXIMATE SCALE : 1" = 20'

APPROXIMATE
AREA EXCAVATED:
7,867.60 FT²

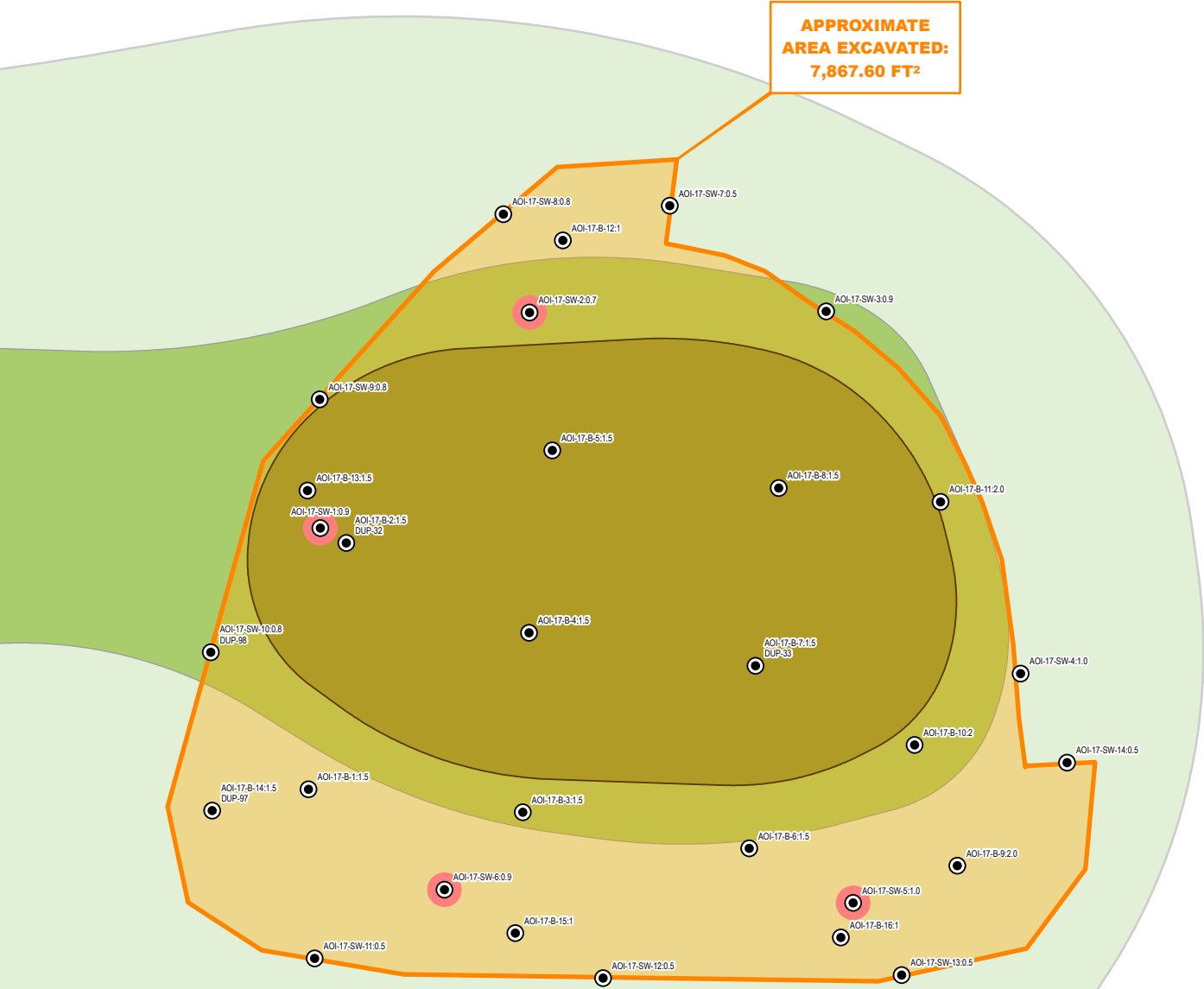
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FIGURE 19
REMEDIAL EXCAVATION - AOI-16

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REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES



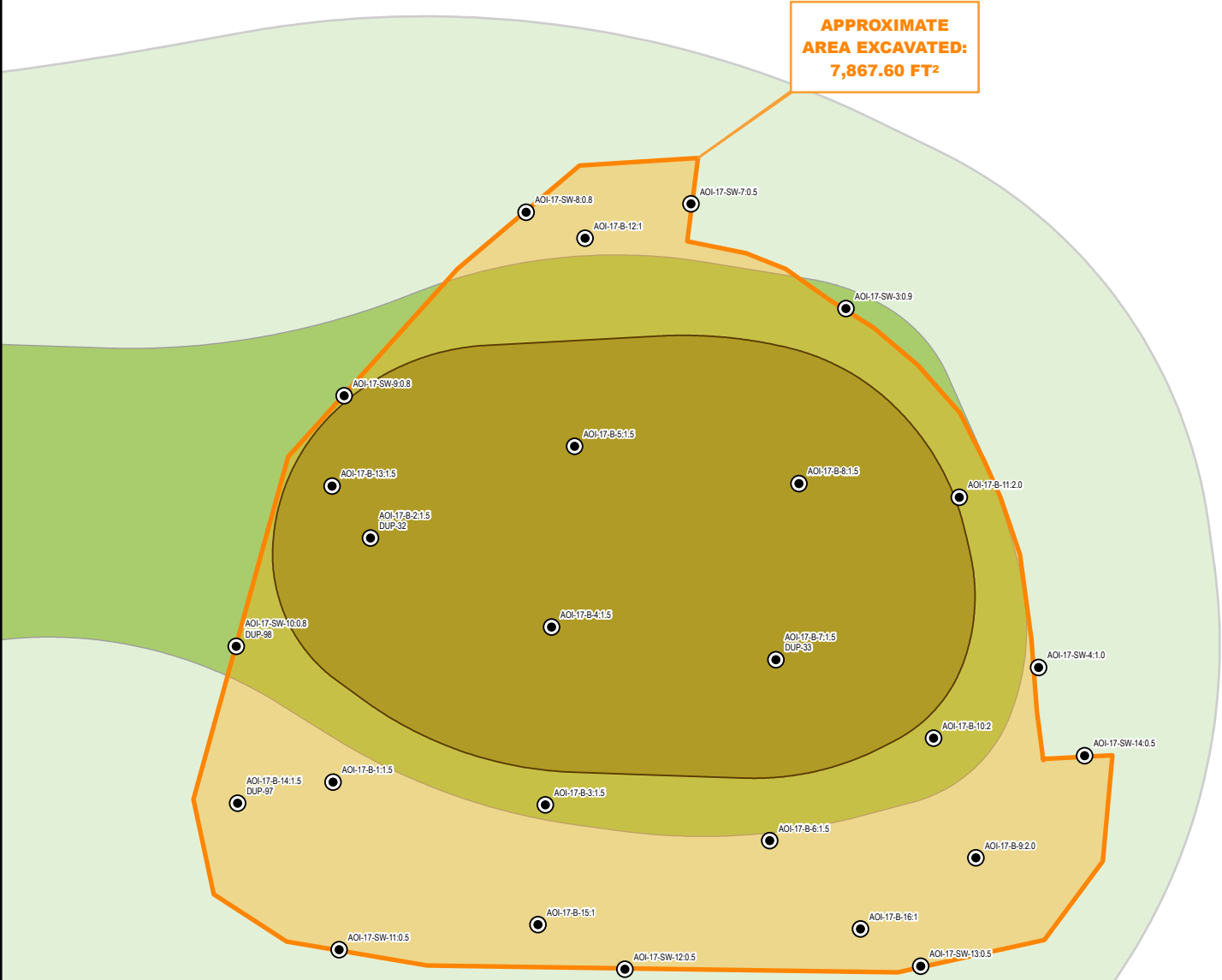
NOTES:

- APPROXIMATE SAMPLE LOCATION
- INDICATES DIELDRIN DETECTED IN PERFORMANCE SAMPLE AT CONCENTRATION GREATER THAN MTCA METHOD B (CANCER) SOIL CLEANUP LEVEL (0.0625 mg/kg)
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- FORMER GOLF COURSE GREEN
- FORMER GOLF COURSE FAIRWAY
- FORMER GOLF COURSE HOLE

20 10 0 20

APPROXIMATE SCALE : 1" = 20'

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



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FIGURE 20
REMEDIAL EXCAVATION - AOI-17

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LOCATION 1802 BROOKDALE ROAD EAST TACOMA, WASHINGTON	DATE 6/22/22 DRAWN BY KPC REVIEWED BY ND

REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES



NOTES:

- APPROXIMATE SAMPLE LOCATION
- INDICATES DIELDRIN DETECTED IN PERFORMANCE SAMPLE AT CONCENTRATION GREATER THAN MTCA METHOD B (CANCER) SOIL CLEANUP LEVEL (0.0625 mg/kg)
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- ▨ FORMER GOLF COURSE TEE BOX
- FORMER GOLF COURSE GREEN
- FORMER GOLF COURSE FAIRWAY
- FORMER GOLF COURSE HOLE

20 10 0 20

APPROXIMATE SCALE : 1" = 20'

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



APPROXIMATE AREA EXCAVATED: 3,840.16 FT²

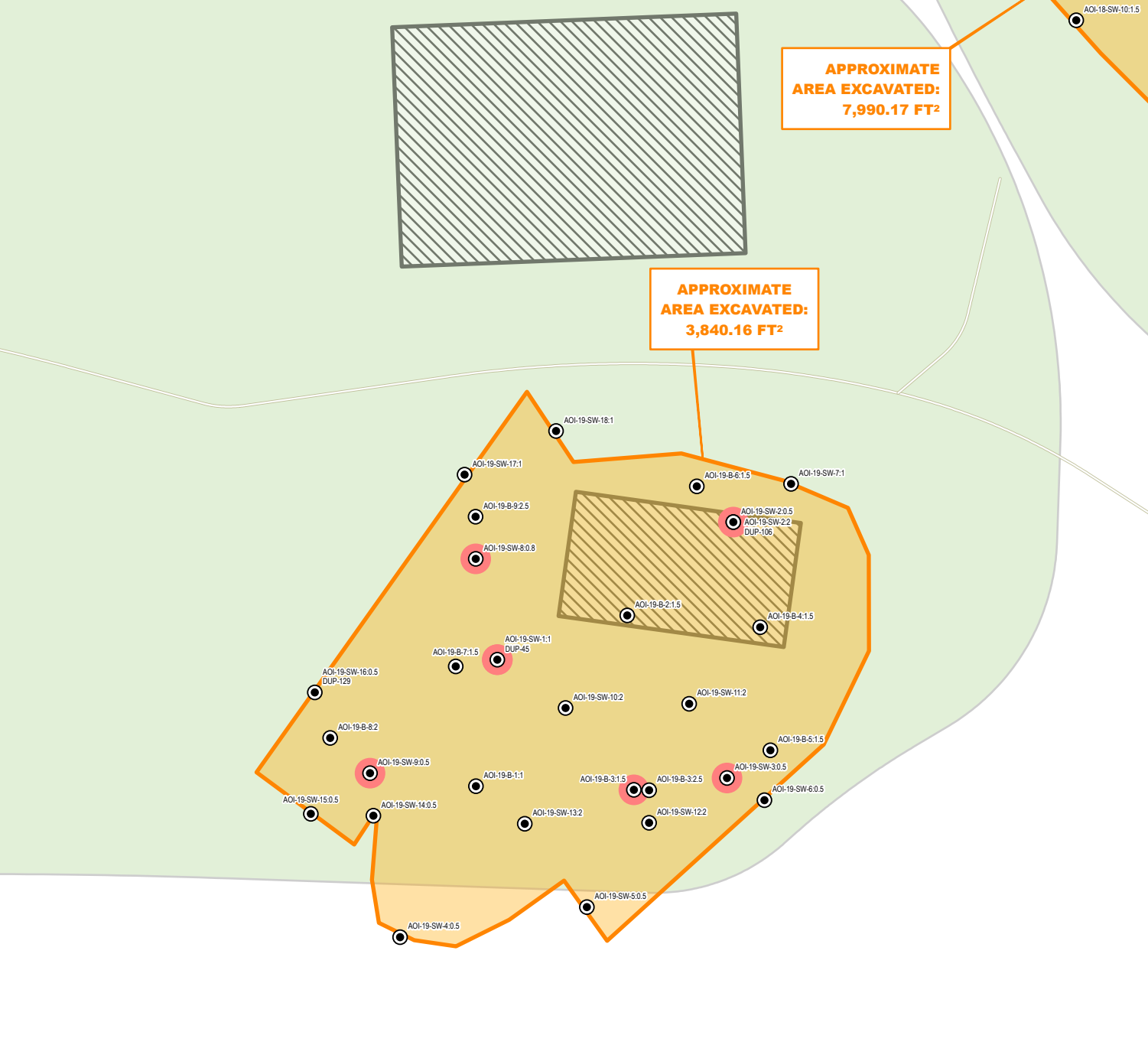
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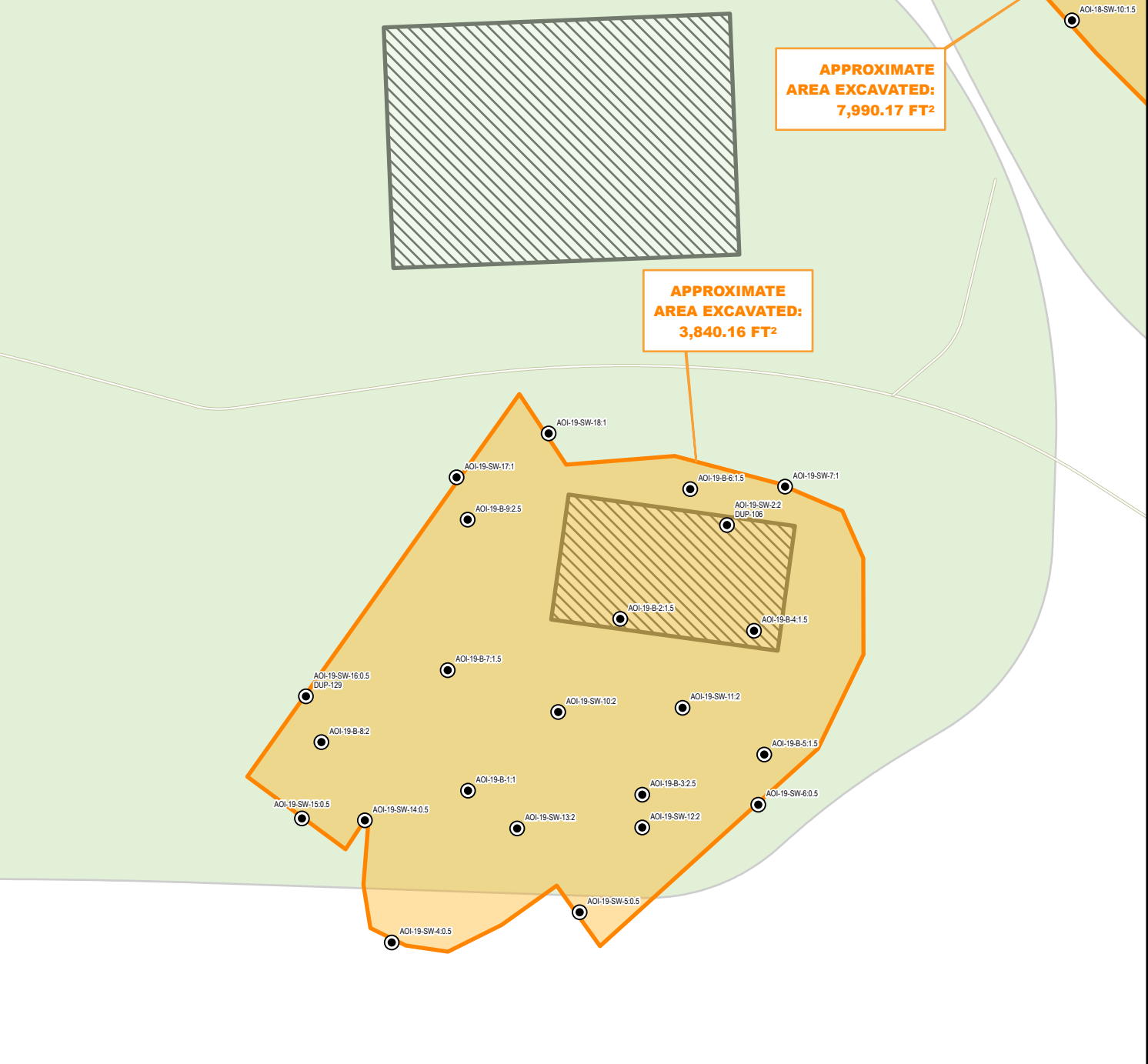
FIGURE 21
REMEDIAL EXCAVATION - AOI-18

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REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES



REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



NOTES:

- APPROXIMATE SAMPLE LOCATION
- INDICATES DIELDRIN DETECTED IN PERFORMANCE SAMPLE AT CONCENTRATION GREATER THAN MTCA METHOD B (CANCER) SOIL CLEANUP LEVEL (0.0625 mg/kg)
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- ▨ FORMER GOLF COURSE TEE BOX
- ▨ FORMER GOLF COURSE FAIRWAY
- FORMER GOLF COURSE HOLE

20 10 0 20

APPROXIMATE SCALE : 1" = 20'

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FIGURE 22
REMEDIAL EXCAVATION - AOI-19

REPORT
CLEANUP ACTION REPORT

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LOCATION
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DATE 6/22/22

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REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES

APPROXIMATE AREA EXCAVATED: 7,502.49 FT²

NOTES:

- APPROXIMATE SAMPLE LOCATION
- INDICATES DIELDRIN DETECTED IN PERFORMANCE SAMPLE AT CONCENTRATION GREATER THAN MTCA METHOD B (CANCER) SOIL CLEANUP LEVEL (0.0625 mg/kg)
- FORMER GOLF COURSE TEE BOX
- FORMER GOLF COURSE HOLE

APPROXIMATE SCALE : 1" = 20'

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES

**APPROXIMATE
AREA EXCAVATED:
7,502.49 FT²**

FIGURE 24
REMEDIAL EXCAVATION - AOI-21

<p>REPORT CLEANUP ACTION REPORT</p> <hr/> <p>LOCATION 1802 BROOKDALE ROAD EAST TACOMA, WASHINGTON</p>	<p>1180 NW MAPLE ST, SUITE 310 ISSAQUAH, WA 98027 425.395.0010 WWW.TRCCOMPANIES.COM</p> <p>PREPARED FOR ICHIJO USA CO., LTD.</p> <hr/> <p>PROJECT NUMBER 430733.0000.0000</p> <hr/> <p>DATE 6/22/22</p> <p>DRAWN BY KPC</p> <p>REVIEWED BY ND</p>
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FIGURE 24
REMEDIAL EXCAVATION - AOI-21

REPORT

CLEANUP ACTION REPORT

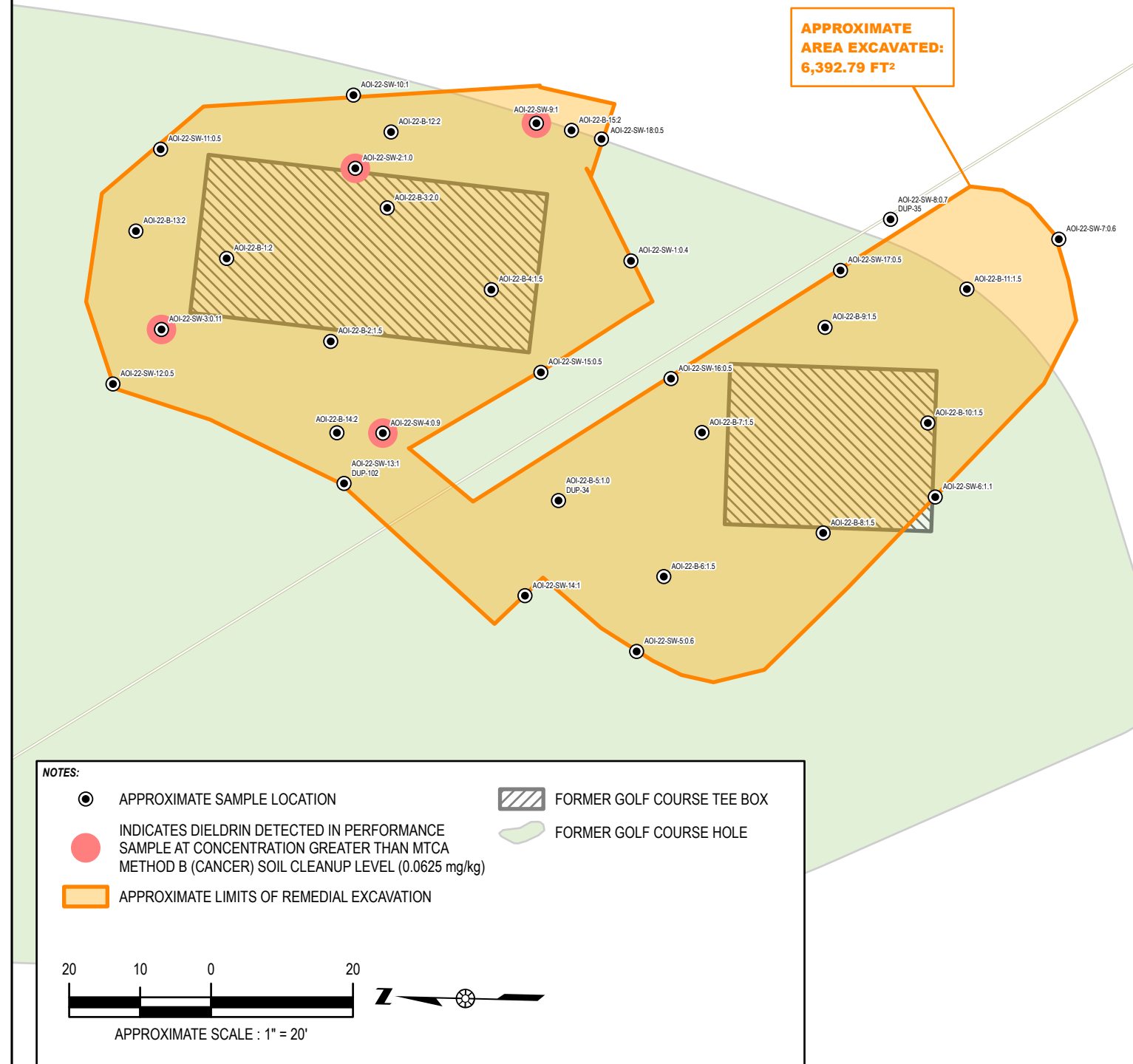
PREPARED FOR
ICHIJO USA CO., LTD.

PROJECT NUMBER
430733.0000.0000

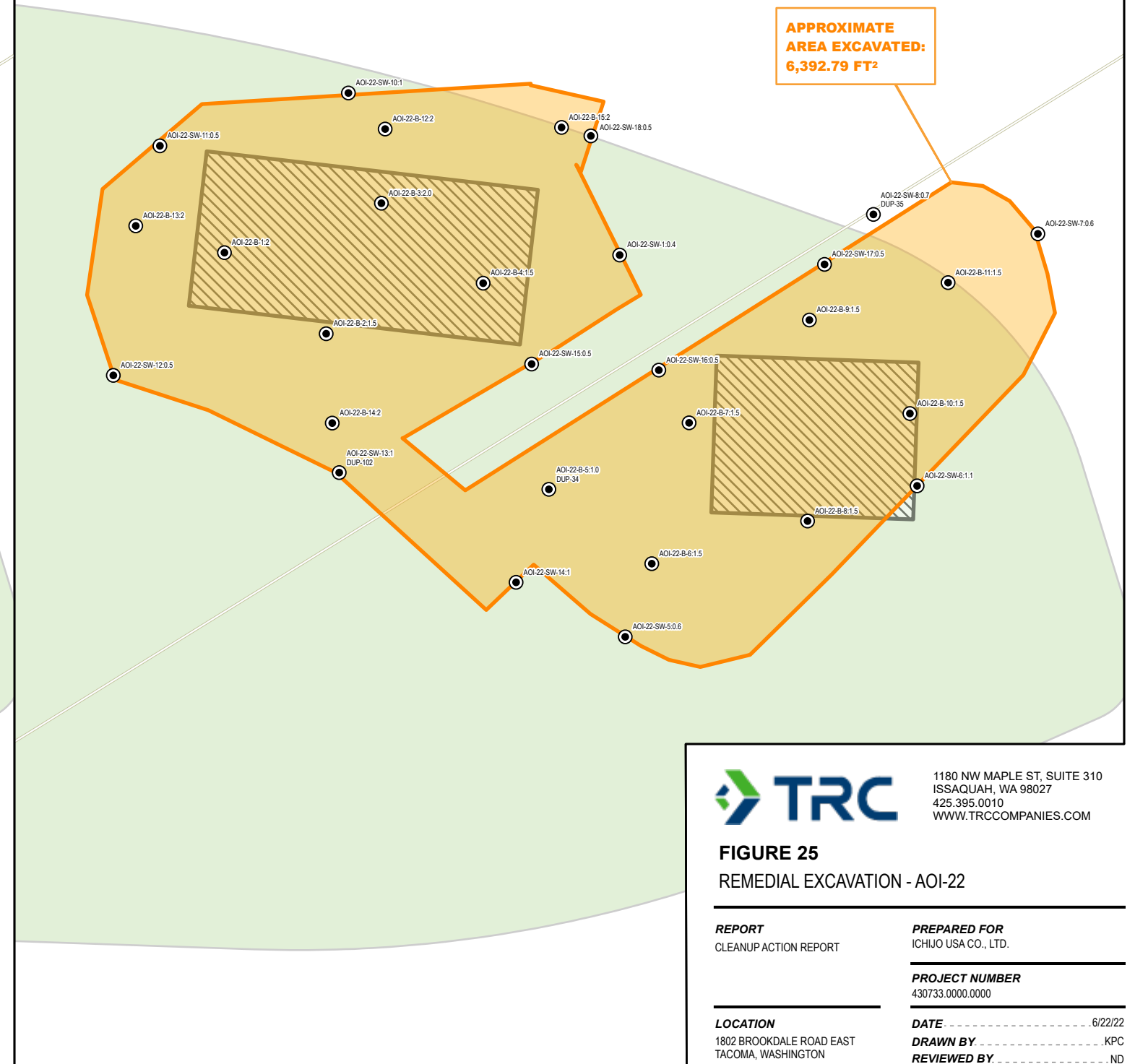
LOCATION
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DATE 6/22/22
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REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES



REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES

APPROXIMATE
AREA EXCAVATED:
11,949.10 FT²

APPROXIMATE
AREA EXCAVATED:
11,949.10 FT²

NOTES:

○

APPROXIMATE SAMPLE LOCATION

●

INDICATES DIELDRIN DETECTED IN PERFORMANCE SAMPLE AT CONCENTRATION GREATER THAN MTCA METHOD B (CANCER) SOIL CLEANUP LEVEL (0.0625 mg/kg)

APPROXIMATE LIMITS OF REMEDIAL EXCAVATION

FORMER GOLF COURSE GREEN

FORMER GOLF COURSE FAIRWAY

FORMER GOLF COURSE HOLE

20

10

0

20

APPROXIMATE SCALE : 1" = 20'

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FIGURE 26

REMEDIAL EXCAVATION - AOI-23

REPORT

CLEANUP ACTION REPORT

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PROJECT NUMBER

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LOCATION

1802 BROOKDALE ROAD EAST
TACOMA, WASHINGTON

DATE

6/22/22

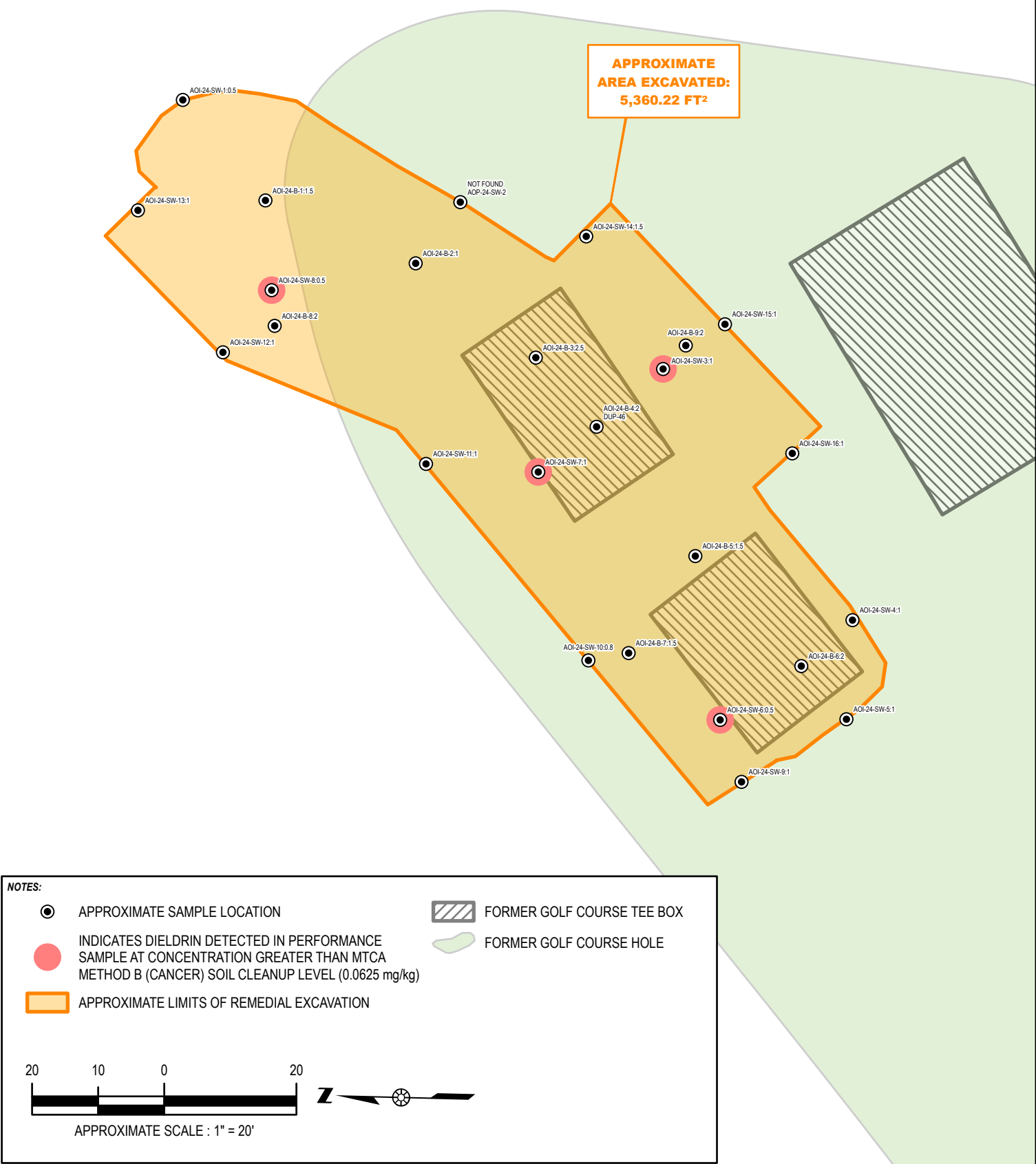
DRAWN BY

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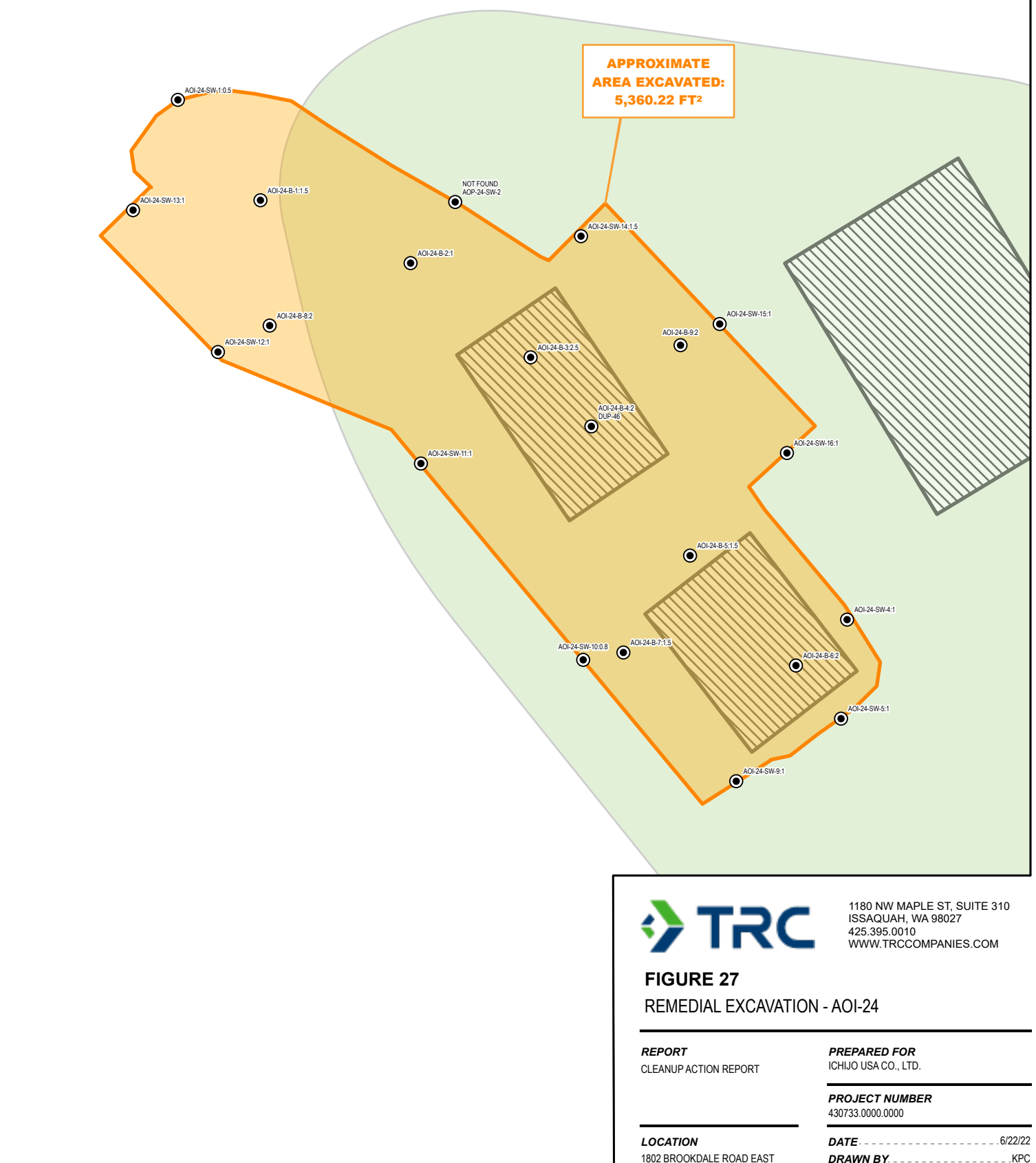
REVIEWED BY

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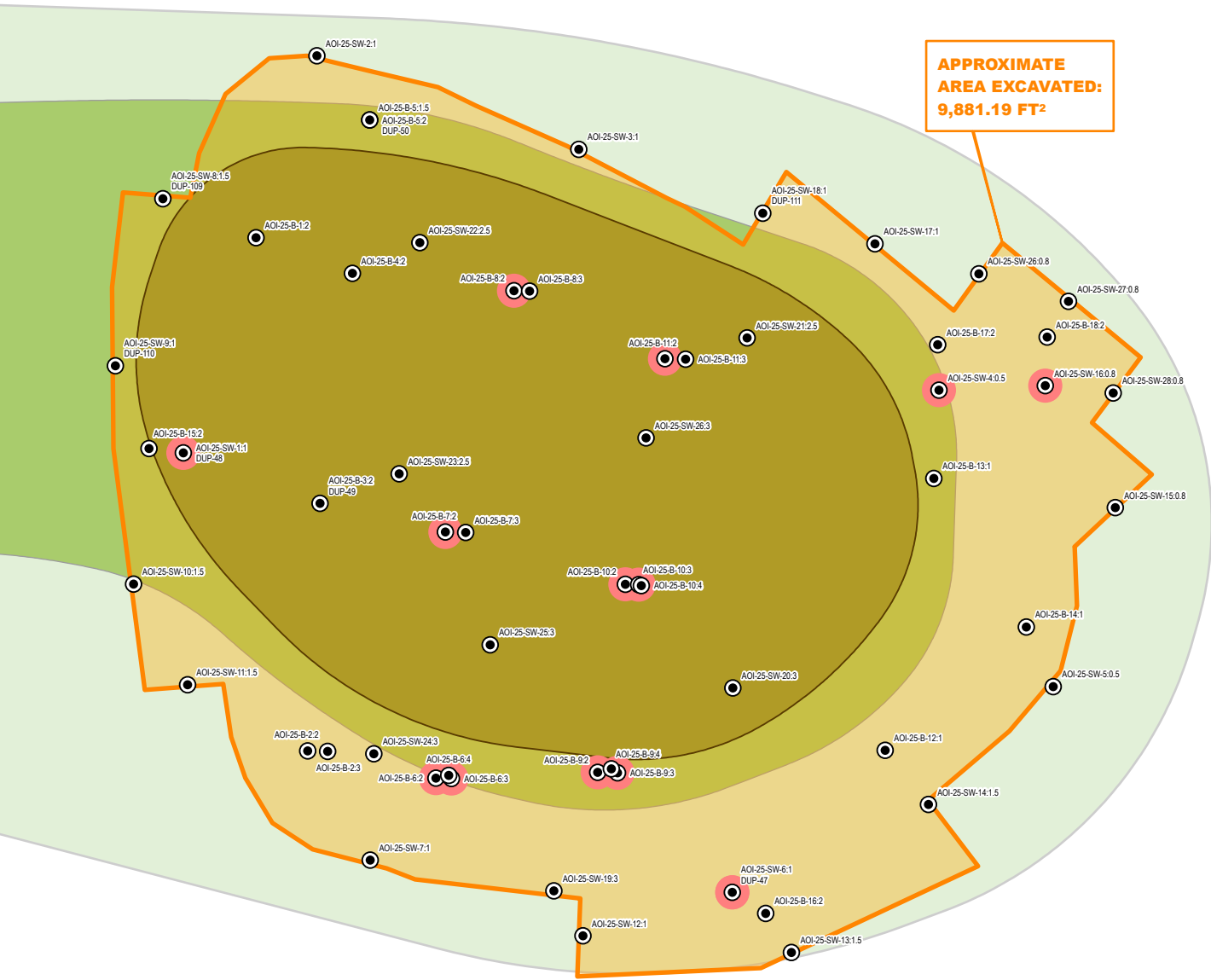
REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES



REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES



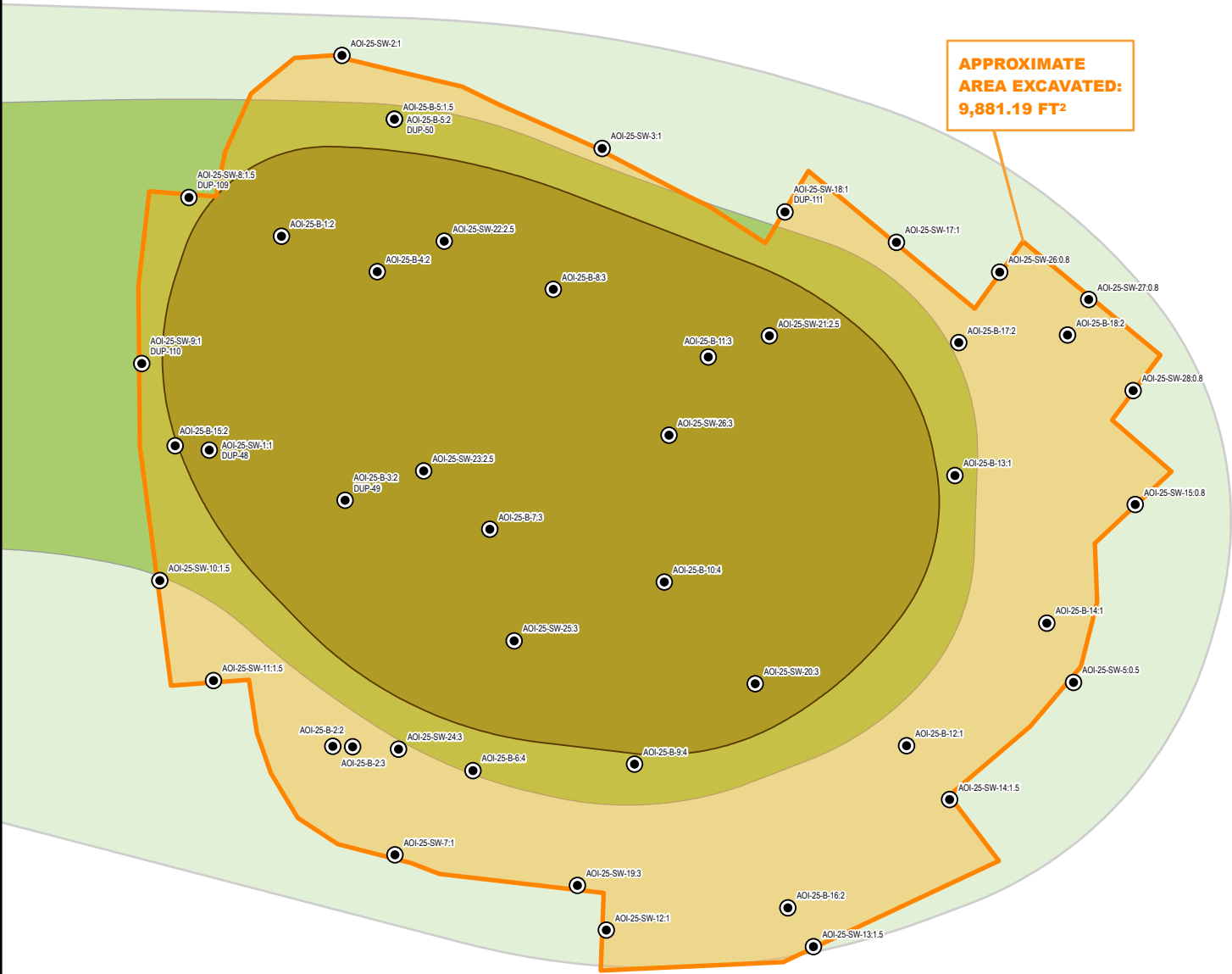
NOTES:

- APPROXIMATE SAMPLE LOCATION
- INDICATES DIELDRIN DETECTED IN PERFORMANCE SAMPLE AT CONCENTRATION GREATER THAN MTCA METHOD B (CANCER) SOIL CLEANUP LEVEL (0.0625 mg/kg)
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- FORMER GOLF COURSE GREEN
- FORMER GOLF COURSE FAIRWAY
- FORMER GOLF COURSE HOLE

20 10 0 20

APPROXIMATE SCALE : 1" = 20'

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



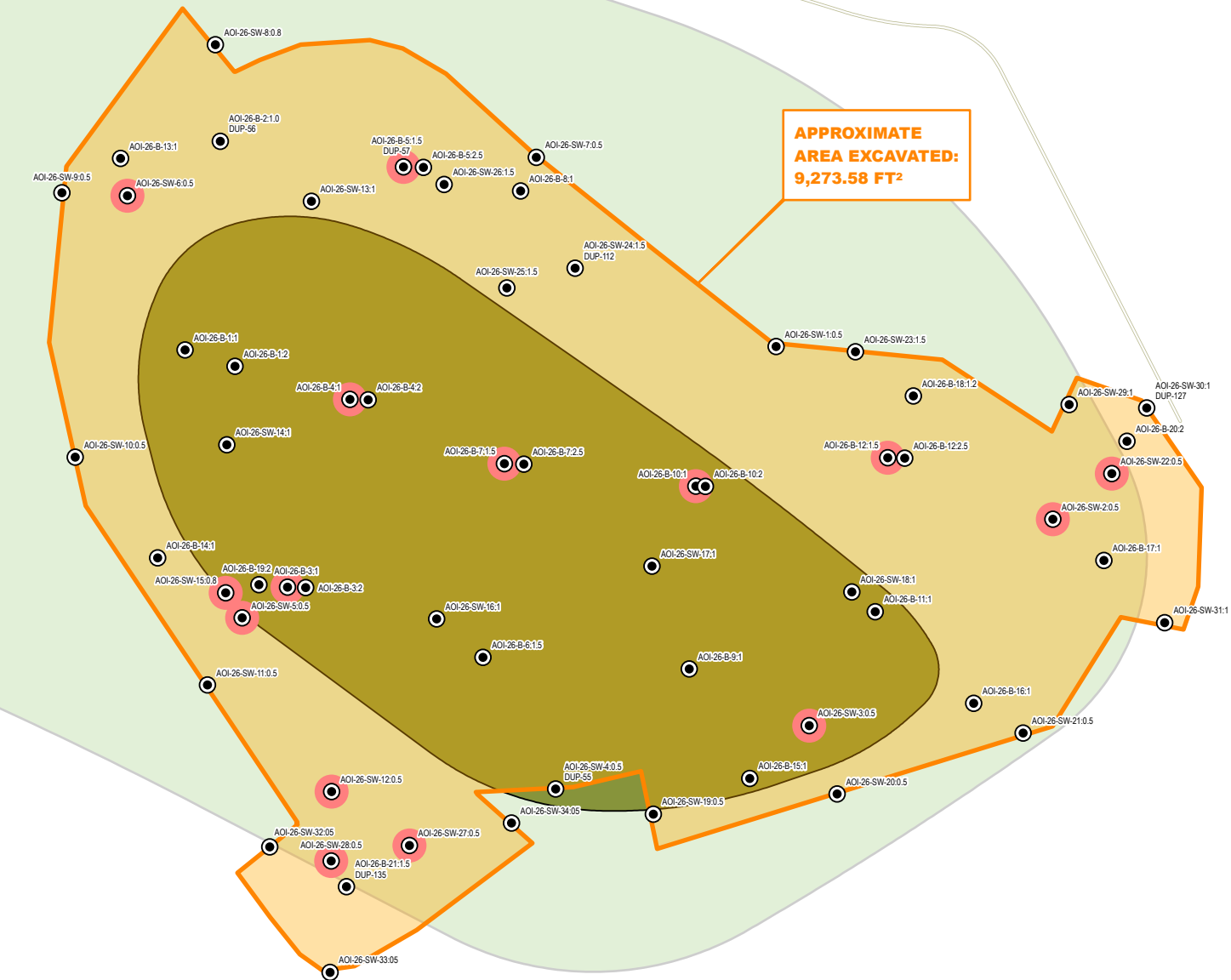
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FIGURE 28
REMEDIAL EXCAVATION - AOI-25

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REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES



NOTES:

- APPROXIMATE SAMPLE LOCATION
- INDICATES DIELDRIN DETECTED IN PERFORMANCE SAMPLE AT CONCENTRATION GREATER THAN MTCA METHOD B (CANCER) SOIL CLEANUP LEVEL (0.0625 mg/kg)
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- FORMER GOLF COURSE GREEN
- FORMER GOLF COURSE HOLE

20 10 0 20

APPROXIMATE SCALE : 1" = 20'

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



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FIGURE 29
REMEDIAL EXCAVATION - AOI-26

REPORT
CLEANUP ACTION REPORT

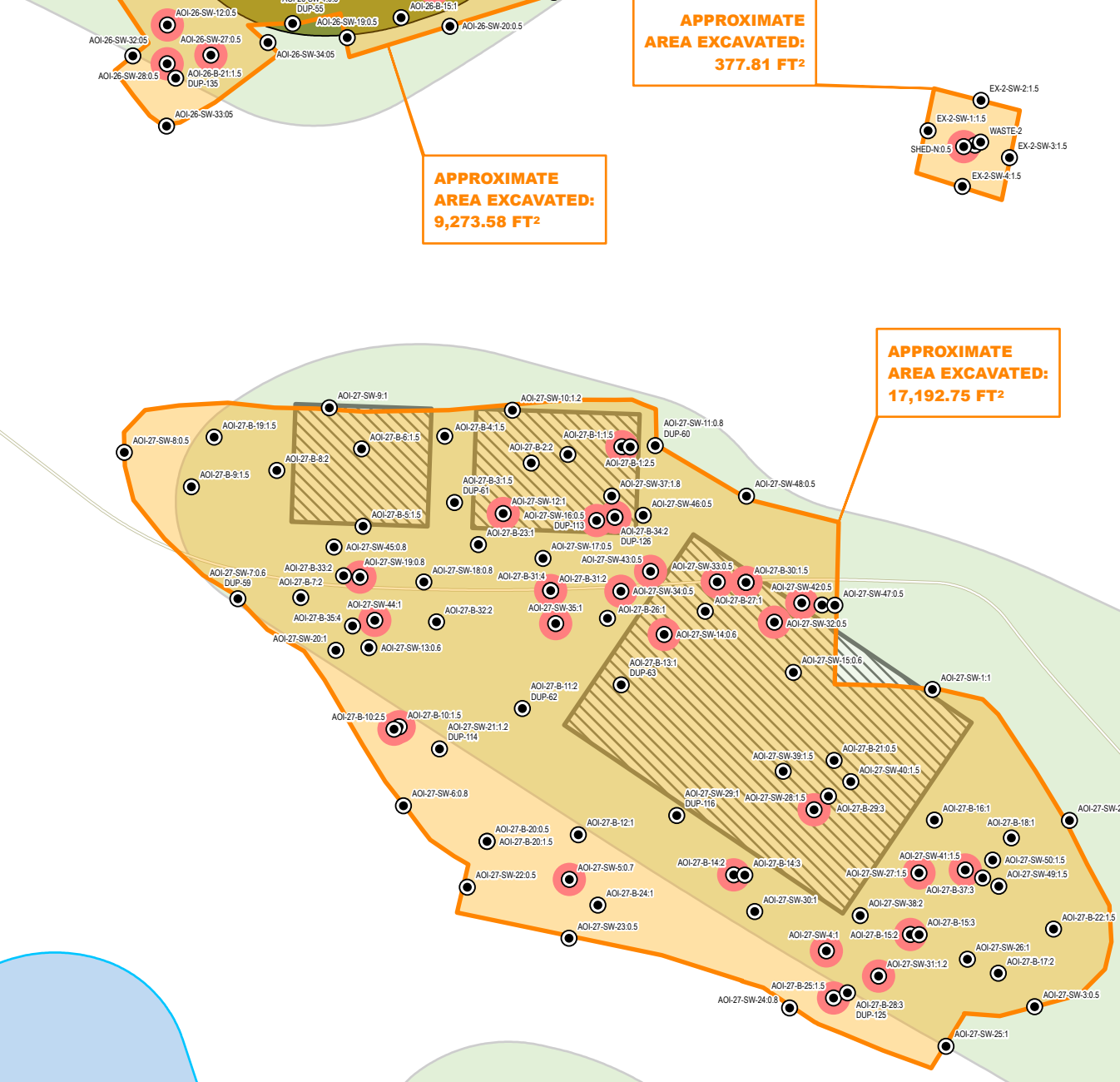
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PROJECT NUMBER
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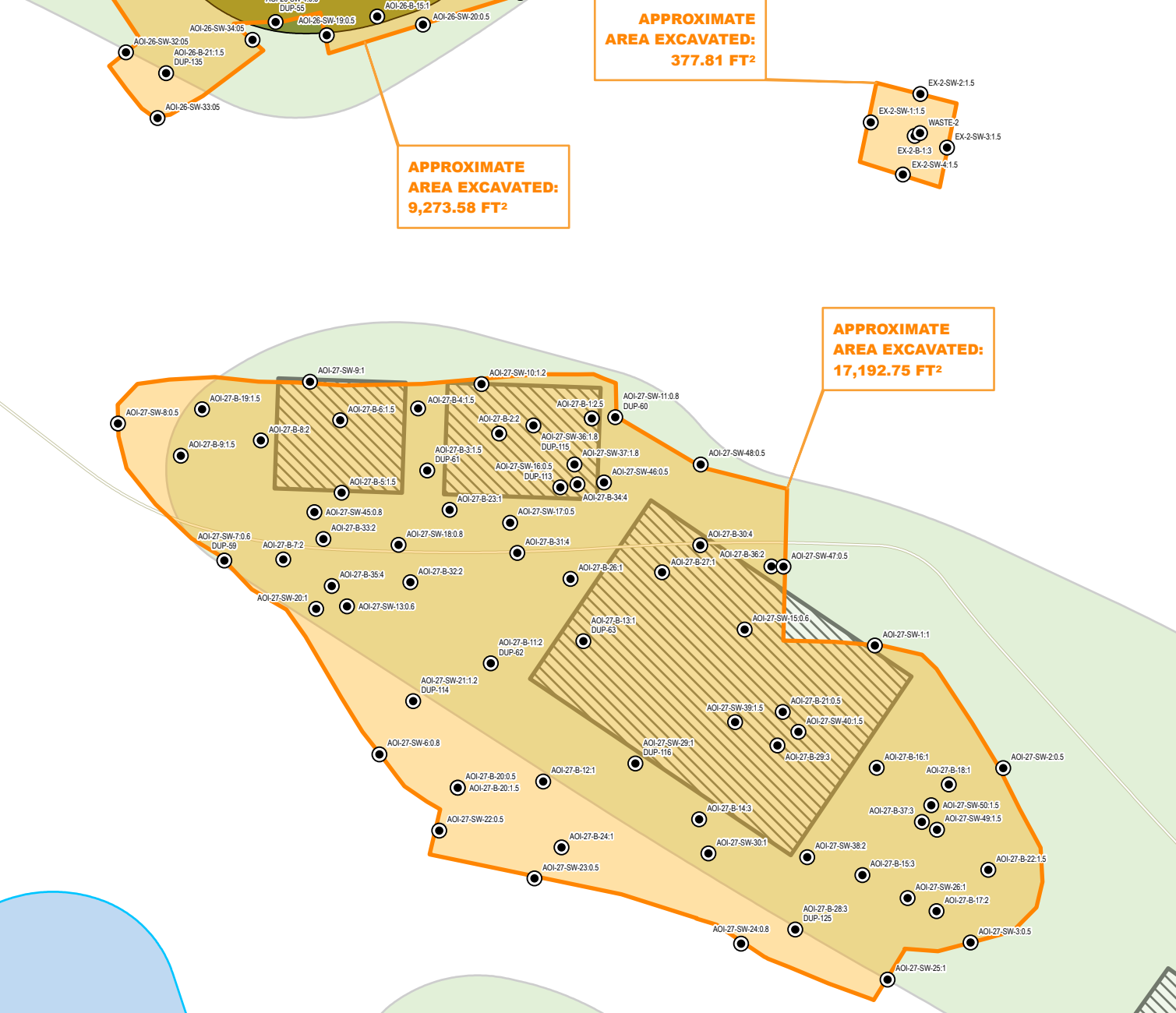
LOCATION
1802 BROOKDALE ROAD EAST
TACOMA, WASHINGTON

DATE 6/22/22
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REVIEWED BY ND

REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES



REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



TRC

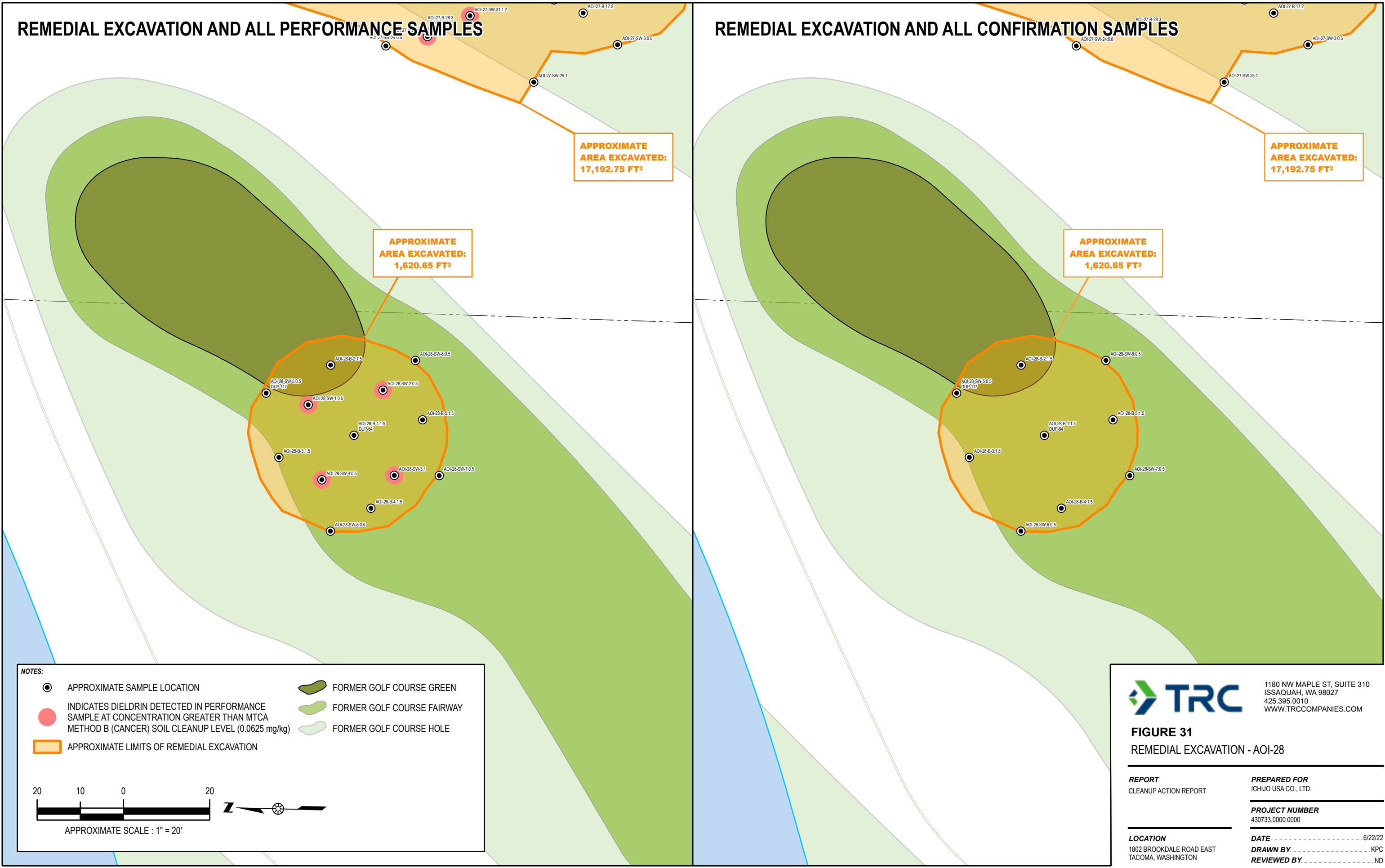
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FIGURE 30
REMEDIAL EXCAVATION - AOI-27

REPORT CLEANUP ACTION REPORT	PREPARED FOR ICHIJO USA CO., LTD.
LOCATION 1802 BROOKDALE ROAD EAST TACOMA, WASHINGTON	PROJECT NUMBER 430733.0000.0000
DATE 6/22/22	DRAWN BY KPC
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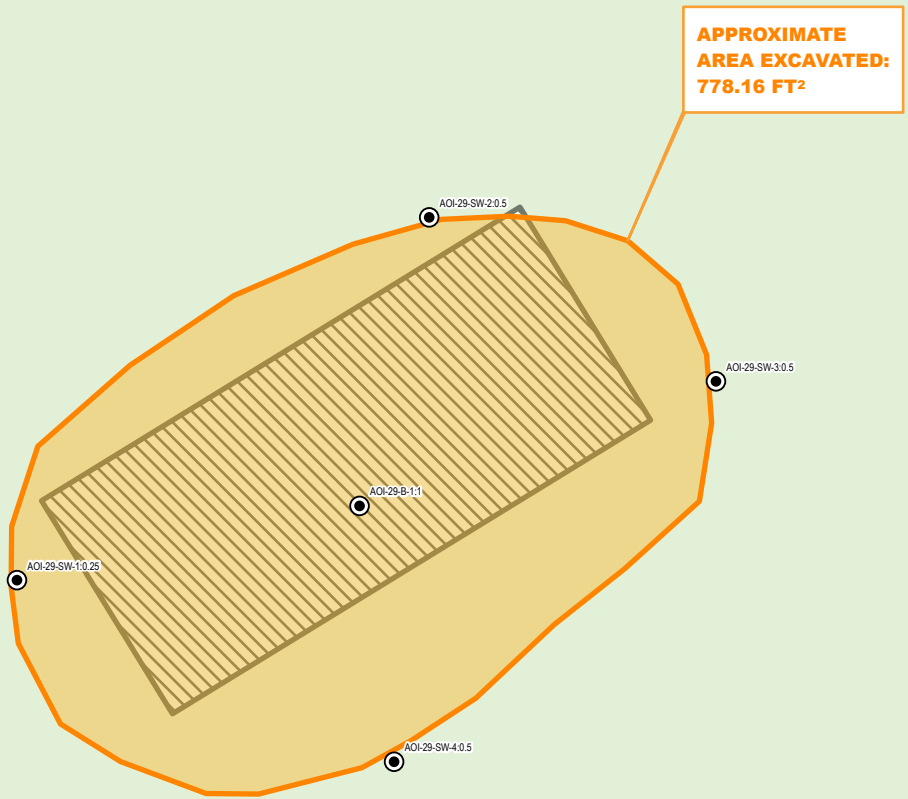
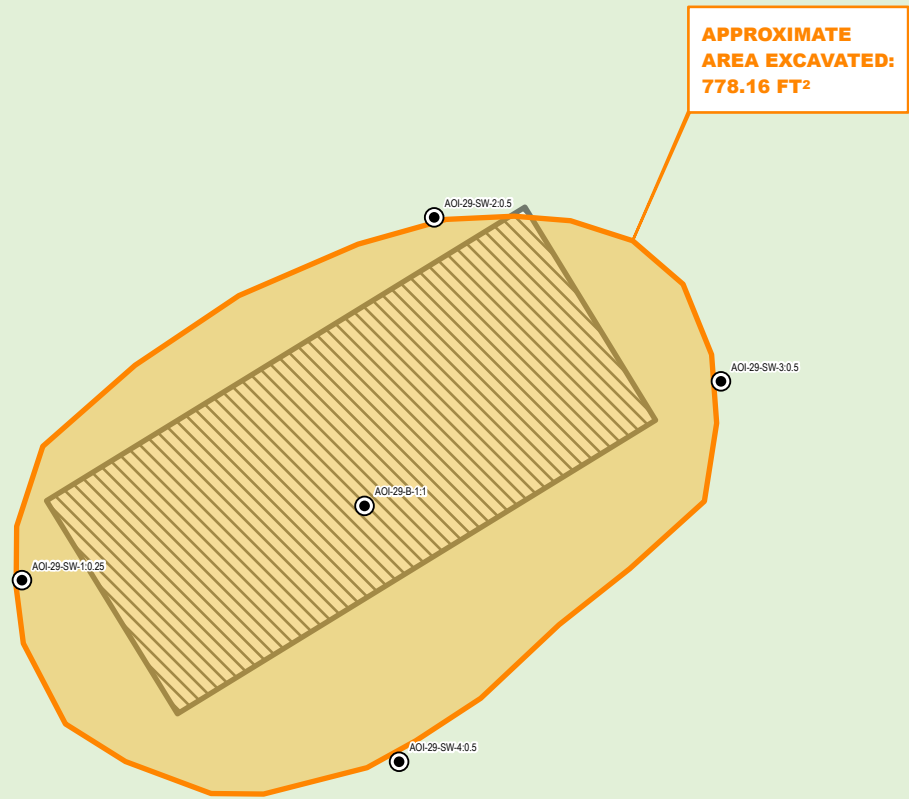
REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



NOTES:

- APPROXIMATE SAMPLE LOCATION
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- ▨ FORMER GOLF COURSE TEE BOX
- FORMER GOLF COURSE HOLE

10 5 0 10

APPROXIMATE SCALE : 1" = 10'



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FIGURE 32
REMEDIAL EXCAVATION - AOI-29

REPORT
CLEANUP ACTION REPORT

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LOCATION
1802 BROOKDALE ROAD EAST
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**APPROXIMATE
AREA EXCAVATED:
9,462.99 FT²**

The map displays the AOI 30 area with various points labeled. The excavated area is highlighted in orange. The points are labeled as follows:

- AOI-30-SW-1:1
- AOI-30-SW-8:1
- DUP-118
- AOI-30-SW-9:1
- AOI-30-B-16:1
- AOI-30-SW-2:1
- AOI-30-SW-10:1
- AOI-30-SW-11:1
- AOI-30-B-10:1
- AOI-30-B-6:2
- AOI-30-B-3:2
- AOI-30-SW-19:0.5
- AOI-30-SW-7:1
- DUP-52
- AOI-30-B-2:2
- AOI-30-B-2:3
- AOI-30-B-5:2
- AOI-30-SW-20:1
- AOI-30-B-1:1
- AOI-30-B-12
- AOI-30-SW-8:0.5
- AOI-30-B-4:1.5
- AOI-30-SW-17:1
- AOI-30-B-7:1.5
- DUP-51
- AOI-30-B-11:2
- AOI-30-SW-4:0.5
- AOI-30-B-14:1
- AOI-30-SW-15:1
- AOI-30-B-12:2
- AOI-30-B-17:4
- AOI-30-SW-13:1
- AOI-30-B-15:1.5
- DUP-53
- AOI-30-B-15:2.5
- AOI-30-SW-3:0.5
- AOI-30-SW-12:1
- AOI-30-B-13:1
- AOI-30-B-13:2
- AOI-30-SW-14:1
- AOI-30-SW-21:1
- AOI-30-B-9:1.5
- AOI-30-B-8:1.5
- AOI-30-B-8:2.5
- AOI-30-SW-18:1
- AOI-30-SW-16:1

**APPROXIMATE
AREA EXCAVATED:
9,462.99 FT²**

APPROXIMATE AREA EXCAVATED: 9,462.99 FT²

Legend:
 Yellow = Excavated Area
 Green = Non-Excavated Area

Map labels include:
 AOI-30-SW-1:1, AOI-30-SW-8:1 DUP-118, AOI-30-SW-9:1, AOI-30-B-16:1, AOI-30-SW-11:1, AOI-30-SW-10:1, AOI-30-B-10:1, AOI-30-B-6:2, AOI-30-SW-19:0.5, AOI-30-B-3:2, AOI-30-SW-7:1 DUP-52, AOI-30-B-2:3, AOI-30-B-5:2, AOI-30-SW-21:1, AOI-30-B-9:1.5, AOI-30-SW-14:1, AOI-30-B-13:2, AOI-30-B-15:2.5, AOI-30-SW-3:0.5, AOI-30-SW-12:1, AOI-30-B-14:1, AOI-30-SW-4:0.5, AOI-30-B-11:2, AOI-30-B-7:1.5 DUP-51, AOI-30-SW-17:1, AOI-30-B-8:2.5, AOI-30-SW-16:1, AOI-30-SW-15:1, AOI-30-B-17:4, AOI-30-SW-13:1, AOI-30-SW-18:1, AOI-30-B-8:1.5, AOI-30-SW-20:1, AOI-30-B-12, AOI-30-SW-6:0.5, AOI-30-B-4:1.5, AOI-30-SW-5:0.5, AOI-30-B-13:1, AOI-30-SW-14:1, AOI-30-B-13:2, AOI-30-SW-15:1, AOI-30-B-16:1, AOI-30-SW-17:1, AOI-30-B-17:4, AOI-30-SW-18:1, AOI-30-B-18:1, AOI-30-SW-19:0.5, AOI-30-B-19:0.5, AOI-30-SW-20:1, AOI-30-B-20:1, AOI-30-SW-21:1, AOI-30-B-21:1, AOI-30-SW-22:1, AOI-30-B-22:1, AOI-30-SW-23:1, AOI-30-B-23:1, AOI-30-SW-24:1, AOI-30-B-24:1, AOI-30-SW-25:1, AOI-30-B-25:1, AOI-30-SW-26:1, AOI-30-B-26:1, AOI-30-SW-27:1, AOI-30-B-27:1, AOI-30-SW-28:1, AOI-30-B-28:1, AOI-30-SW-29:1, AOI-30-B-29:1, AOI-30-SW-30:1, AOI-30-B-30:1, AOI-30-SW-31:1, AOI-30-B-31:1, AOI-30-SW-32:1, AOI-30-B-32:1, AOI-30-SW-33:1, AOI-30-B-33:1, AOI-30-SW-34:1, AOI-30-B-34:1, AOI-30-SW-35:1, AOI-30-B-35:1, AOI-30-SW-36:1, AOI-30-B-36:1, AOI-30-SW-37:1, AOI-30-B-37:1, AOI-30-SW-38:1, AOI-30-B-38:1, AOI-30-SW-39:1, AOI-30-B-39:1, AOI-30-SW-40:1, AOI-30-B-40:1, AOI-30-SW-41:1, AOI-30-B-41:1, AOI-30-SW-42:1, AOI-30-B-42:1, AOI-30-SW-43:1, AOI-30-B-43:1, AOI-30-SW-44:1, AOI-30-B-44:1, AOI-30-SW-45:1, AOI-30-B-45:1, AOI-30-SW-46:1, AOI-30-B-46:1, AOI-30-SW-47:1, AOI-30-B-47:1, AOI-30-SW-48:1, AOI-30-B-48:1, AOI-30-SW-49:1, AOI-30-B-49:1, AOI-30-SW-50:1, AOI-30-B-50:1, AOI-30-SW-51:1, AOI-30-B-51:1, AOI-30-SW-52:1, AOI-30-B-52:1, AOI-30-SW-53:1, AOI-30-B-53:1, AOI-30-SW-54:1, AOI-30-B-54:1, AOI-30-SW-55:1, AOI-30-B-55:1, AOI-30-SW-56:1, AOI-30-B-56:1, AOI-30-SW-57:1, AOI-30-B-57:1, AOI-30-SW-58:1, AOI-30-B-58:1, AOI-30-SW-59:1, AOI-30-B-59:1, AOI-30-SW-60:1, AOI-30-B-60:1, AOI-30-SW-61:1, AOI-30-B-61:1, AOI-30-SW-62:1, AOI-30-B-62:1, AOI-30-SW-63:1, AOI-30-B-63:1, AOI-30-SW-64:1, AOI-30-B-64:1, AOI-30-SW-65:1, AOI-30-B-65:1, AOI-30-SW-66:1, AOI-30-B-66:1, AOI-30-SW-67:1, AOI-30-B-67:1, AOI-30-SW-68:1, AOI-30-B-68:1, AOI-30-SW-69:1, AOI-30-B-69:1, AOI-30-SW-70:1, AOI-30-B-70:1, AOI-30-SW-71:1, AOI-30-B-71:1, AOI-30-SW-72:1, AOI-30-B-72:1, AOI-30-SW-73:1, AOI-30-B-73:1, AOI-30-SW-74:1, AOI-30-B-74:1, AOI-30-SW-75:1, AOI-30-B-75:1, AOI-30-SW-76:1, AOI-30-B-76:1, AOI-30-SW-77:1, AOI-30-B-77:1, AOI-30-SW-78:1, AOI-30-B-78:1, AOI-30-SW-79:1, AOI-30-B-79:1, AOI-30-SW-80:1, AOI-30-B-80:1, AOI-30-SW-81:1, AOI-30-B-81:1, AOI-30-SW-82:1, AOI-30-B-82:1, AOI-30-SW-83:1, AOI-30-B-83:1, AOI-30-SW-84:1, AOI-30-B-84:1, AOI-30-SW-85:1, AOI-30-B-85:1, AOI-30-SW-86:1, AOI-30-B-86:1, AOI-30-SW-87:1, AOI-30-B-87:1, AOI-30-SW-88:1, AOI-30-B-88:1, AOI-30-SW-89:1, AOI-30-B-89:1, AOI-30-SW-90:1, AOI-30-B-90:1, AOI-30-SW-91:1, AOI-30-B-91:1, AOI-30-SW-92:1, AOI-30-B-92:1, AOI-30-SW-93:1, AOI-30-B-93:1, AOI-30-SW-94:1, AOI-30-B-94:1, AOI-30-SW-95:1, AOI-30-B-95:1, AOI-30-SW-96:1, AOI-30-B-96:1, AOI-30-SW-97:1, AOI-30-B-97:1, AOI-30-SW-98:1, AOI-30-B-98:1, AOI-30-SW-99:1, AOI-30-B-99:1, AOI-30-SW-100:1, AOI-30-B-100:1, AOI-30-SW-101:1, AOI-30-B-101:1, AOI-30-SW-102:1, AOI-30-B-102:1, AOI-30-SW-103:1, AOI-30-B-103:1, AOI-30-SW-104:1, AOI-30-B-104:1, AOI-30-SW-105:1, AOI-30-B-105:1, AOI-30-SW-106:1, AOI-30-B-106:1, AOI-30-SW-107:1, AOI-30-B-107:1, AOI-30-SW-108:1, AOI-30-B-108:1, AOI-30-SW-109:1, AOI-30-B-109:1, AOI-30-SW-110:1, AOI-30-B-110:1, AOI-30-SW-111:1, AOI-30-B-111:1, AOI-30-SW-112:1, AOI-30-B-112:1, AOI-30-SW-113:1, AOI-30-B-113:1, AOI-30-SW-114:1, AOI-30-B-114:1, AOI-30-SW-115:1, AOI-30-B-115:1, AOI-30-SW-116:1, AOI-30-B-116:1, AOI-30-SW-117:1, AOI-30-B-117:1, AOI-30-SW-118:1, AOI-30-B-118:1, AOI-30-SW-119:1, AOI-30-B-119:1, AOI-30-SW-120:1, AOI-30-B-120:1, AOI-30-SW-121:1, AOI-30-B-121:1, AOI-30-SW-122:1, AOI-30-B-122:1, AOI-30-SW-123:1, AOI-30-B-123:1, AOI-30-SW-124:1, AOI-30-B-124:1, AOI-30-SW-125:1, AOI-30-B-125:1, AOI-30-SW-126:1, AOI-30-B-126:1, AOI-30-SW-127:1, AOI-30-B-127:1, AOI-30-SW-128:1, AOI-30-B-128:1, AOI-30-SW-129:1, AOI-30-B-129:1, AOI-30-SW-130:1, AOI-30-B-130:1, AOI-30-SW-131:1, AOI-30-B-131:1, AOI-30-SW-132:1, AOI-30-B-132:1, AOI-30-SW-133:1, AOI-30-B-133:1, AOI-30-SW-134:1, AOI-30-B-134:1, AOI-30-SW-135:1, AOI-30-B-135:1, AOI-30-SW-136:1, AOI-30-B-136:1, AOI-30-SW-137:1, AOI-30-B-137:1, AOI-30-SW-138:1, AOI-30-B-138:1, AOI-30-SW-139:1, AOI-30-B-139:1, AOI-30-SW-140:1, AOI-30-B-140:1, AOI-30-SW-141:1, AOI-30-B-141:1, AOI-30-SW-142:1, AOI-30-B-142:1, AOI-30-SW-143:1, AOI-30-B-143:1, AOI-30-SW-144:1, AOI-30-B-144:1, AOI-30-SW-145:1, AOI-30-B-145:1, AOI-30-SW-146:1, AOI-30-B-146:1, AOI-

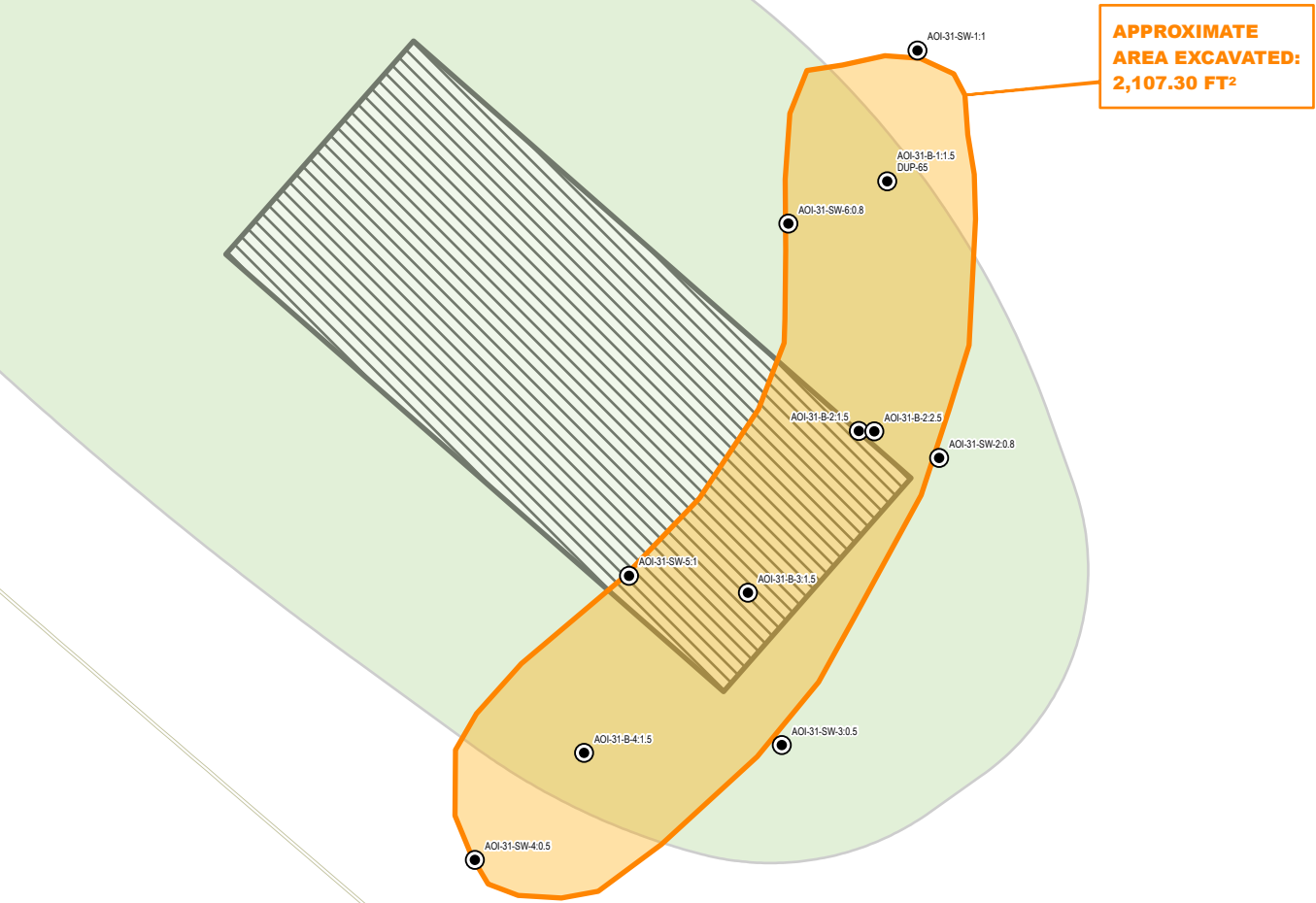
**APPROXIMATE
AREA EXCAVATED:
9,462.99 FT²**



FIGURE 33
REMEDIAL EXCAVATION - AOI-30

REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES

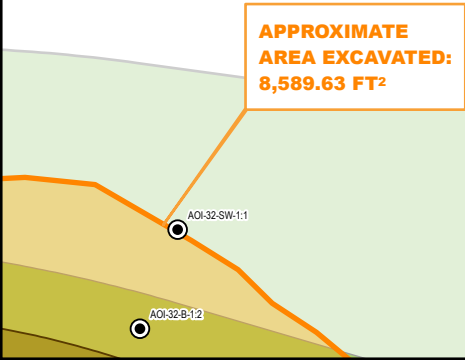


NOTES:

- APPROXIMATE SAMPLE LOCATION
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- FORMER GOLF COURSE TEE BOX
- FORMER GOLF COURSE GREEN
- FORMER GOLF COURSE FAIRWAY
- FORMER GOLF COURSE HOLE

20 10 0 20

APPROXIMATE SCALE : 1" = 20'



TRC

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FIGURE 34
REMEDIAL EXCAVATION - AOI-31

REPORT
CLEANUP ACTION REPORT

PREPARED FOR
ICHIJO USA CO., LTD.

PROJECT NUMBER
430733.0000.0000

LOCATION
1802 BROOKDALE ROAD EAST
TACOMA, WASHINGTON

DATE 6/22/22

DRAWN BY KPC

REVIEWED BY ND

REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES

APPROXIMATE
AREA EXCAVATED:
2,107.30 FT²

APPROXIMATE
AREA EXCAVATED:
8,589.63 FT²

NOTES:

- APPROXIMATE SAMPLE LOCATION
- INDICATES DIELDRIN DETECTED IN PERFORMANCE SAMPLE AT CONCENTRATION GREATER THAN MTCA METHOD B (CANCER) SOIL CLEANUP LEVEL (0.0625 mg/kg)
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- FORMER GOLF COURSE GREEN
- FORMER GOLF COURSE FAIRWAY
- FORMER GOLF COURSE HOLE

20 10 0 20

APPROXIMATE SCALE : 1" = 20'

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES

APPROXIMATE
AREA EXCAVATED:
2,107.30 FT²

APPROXIMATE
AREA EXCAVATED:
8,589.63 FT²



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ISSAQUAH, WA 98027
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FIGURE 35
REMEDIAL EXCAVATION - AOI-32

REPORT
CLEANUP ACTION REPORT

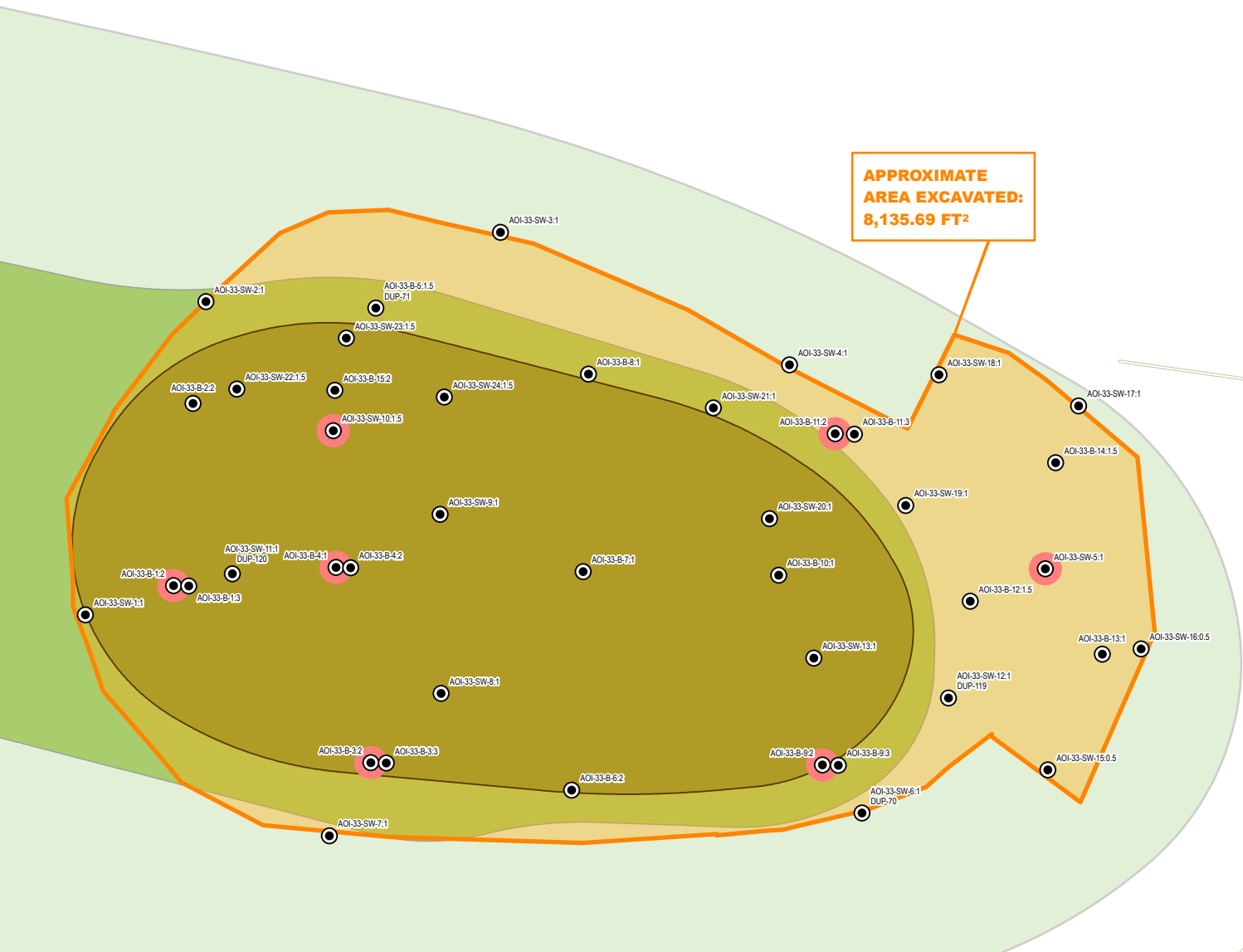
PREPARED FOR
ICHIJO USA CO., LTD.

PROJECT NUMBER
430733.0000.0000

LOCATION
1802 BROOKDALE ROAD EAST
TACOMA, WASHINGTON

DATE 6/22/22
DRAWN BY KPC
REVIEWED BY ND

REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES



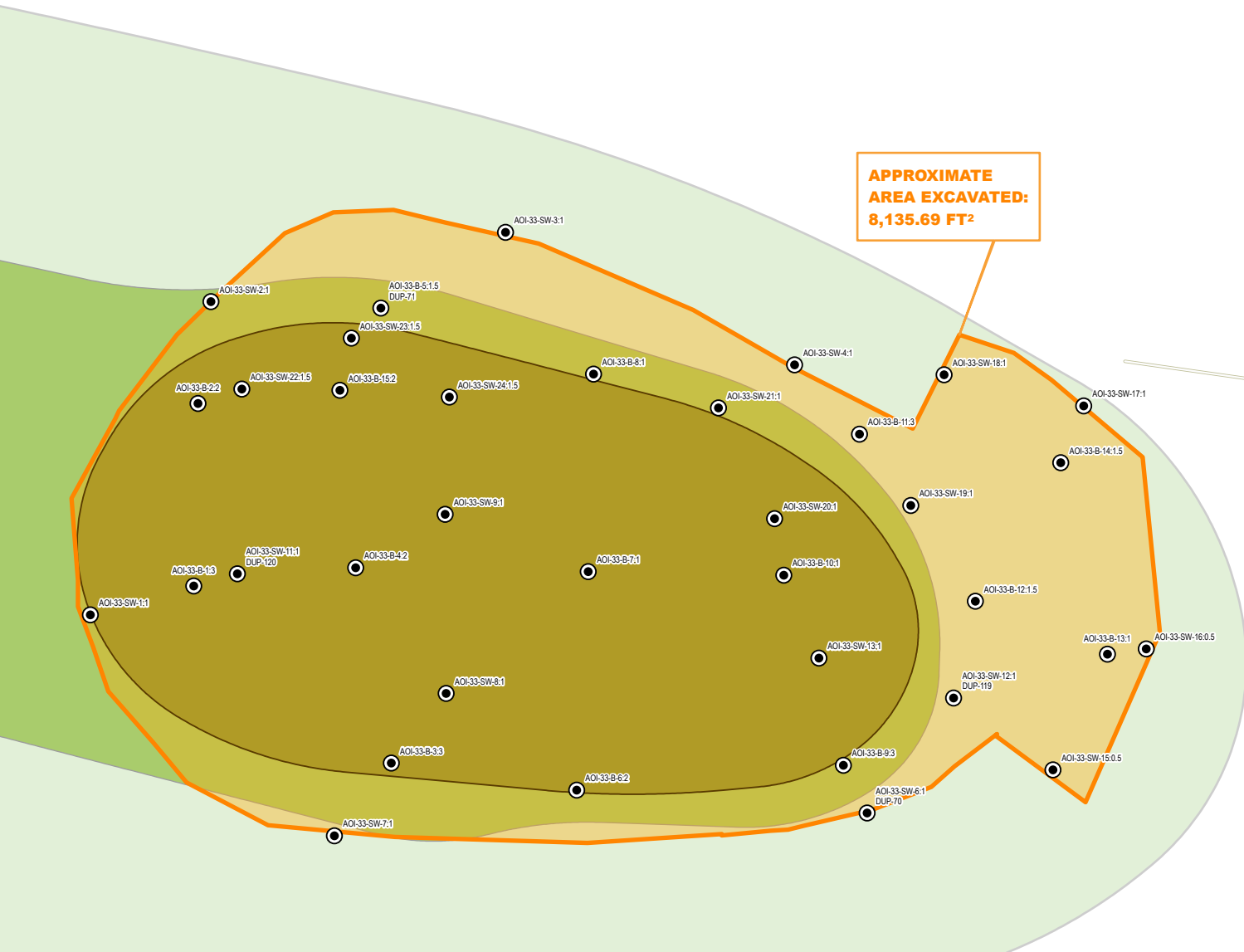
NOTES:

- APPROXIMATE SAMPLE LOCATION
- INDICATES DIELDRIN DETECTED IN PERFORMANCE SAMPLE AT CONCENTRATION GREATER THAN MTCA METHOD B (CANCER) SOIL CLEANUP LEVEL (0.0625 mg/kg)
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- FORMER GOLF COURSE GREEN
- FORMER GOLF COURSE FAIRWAY
- FORMER GOLF COURSE HOLE

20 10 0 20

APPROXIMATE SCALE : 1" = 20'

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



TRC

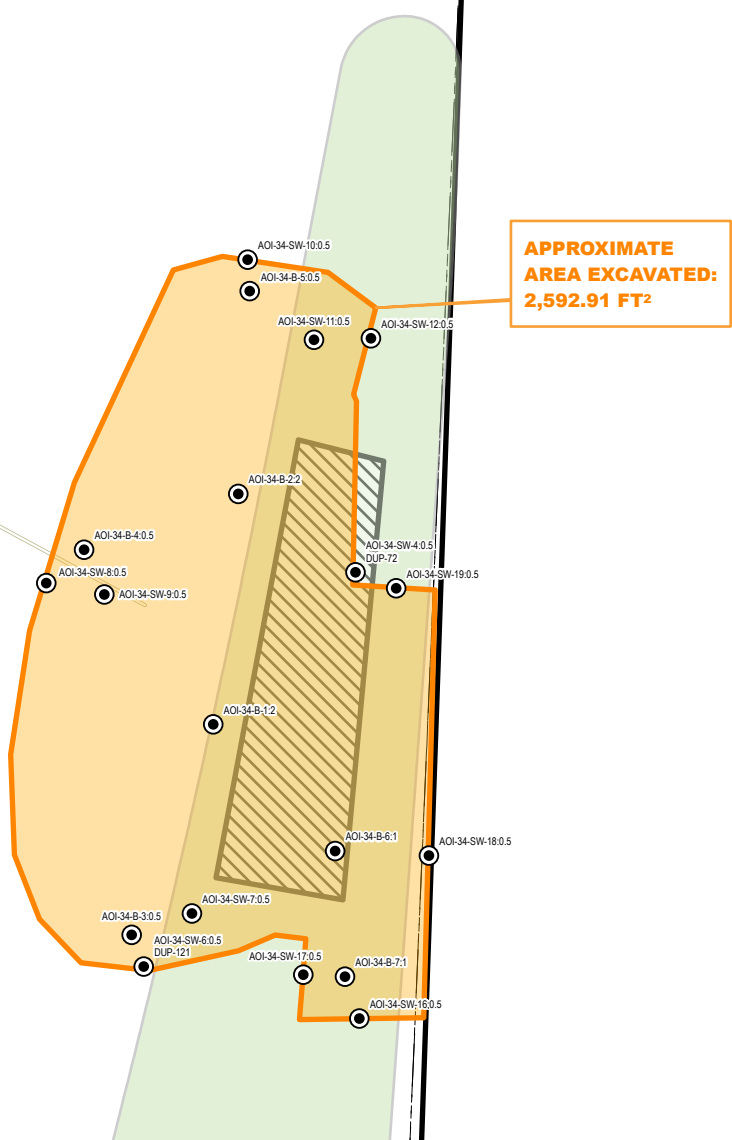
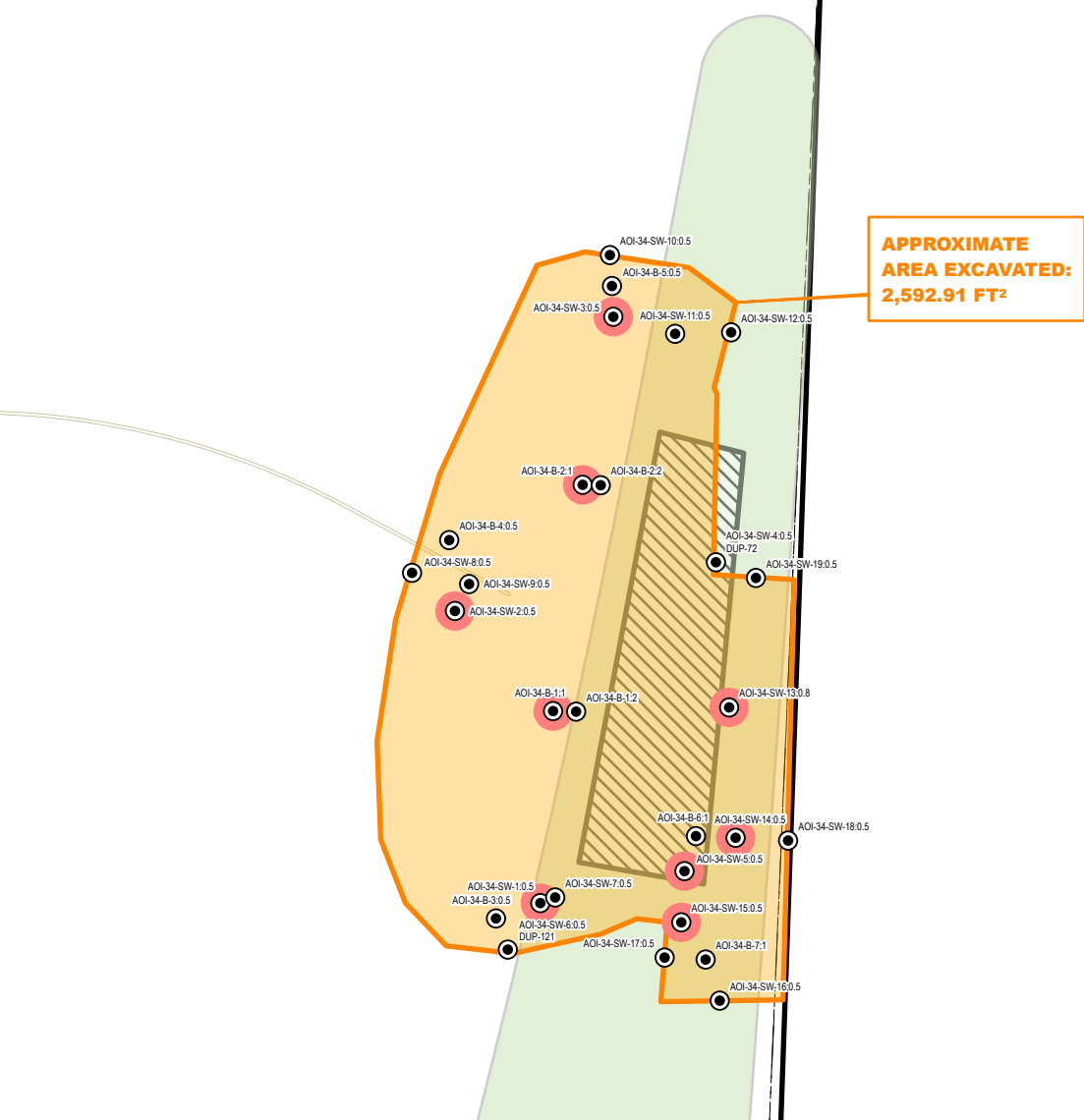
1180 NW MAPLE ST, SUITE 310
ISSAQUAH, WA 98027
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FIGURE 36
REMEDIAL EXCAVATION - AOI-33

REPORT CLEANUP ACTION REPORT	PREPARED FOR ICHIJO USA CO., LTD.
LOCATION 1802 BROOKDALE ROAD EAST TACOMA, WASHINGTON	PROJECT NUMBER 430733.0000.0000
DATE 6/22/22	DRAWN BY KPC
REVIEWED BY ND	

REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



NOTES:

- APPROXIMATE SAMPLE LOCATION
- INDICATES DIELDRIN DETECTED IN PERFORMANCE SAMPLE AT CONCENTRATION GREATER THAN MTCA METHOD B (CANCER) SOIL CLEANUP LEVEL (0.0625 mg/kg)
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- ▨ FORMER GOLF COURSE TEE BOX
- FORMER GOLF COURSE HOLE

20 10 0 20

APPROXIMATE SCALE : 1" = 20'

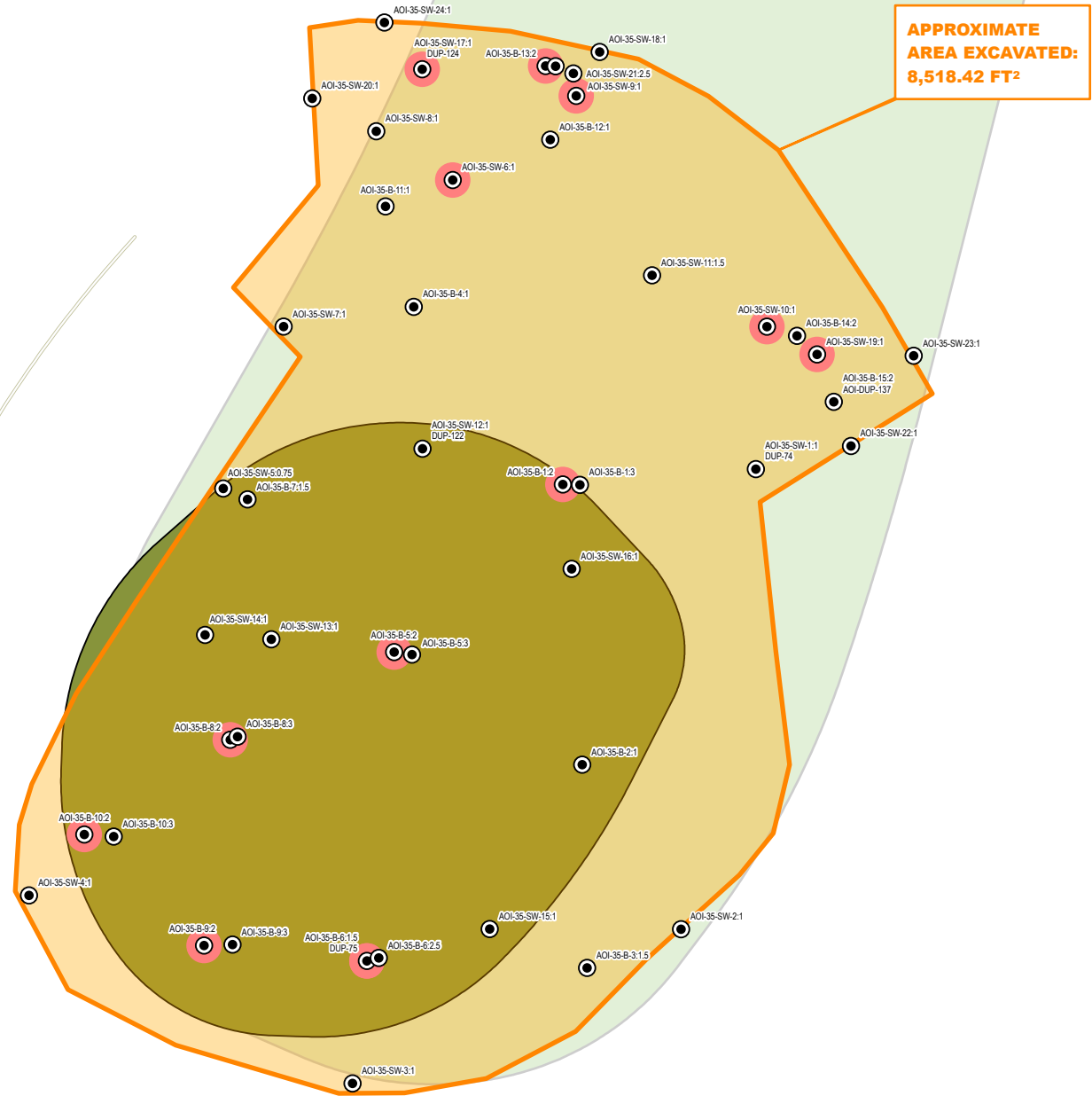
TRC

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FIGURE 37
REMEDIAL EXCAVATION - AOI-34

REPORT CLEANUP ACTION REPORT	PREPARED FOR ICHIJO USA CO., LTD.
	PROJECT NUMBER 430733.0000.0000
LOCATION 1802 BROOKDALE ROAD EAST TACOMA, WASHINGTON	DATE 6/22/22 DRAWN BY KPC REVIEWED BY ND

REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES



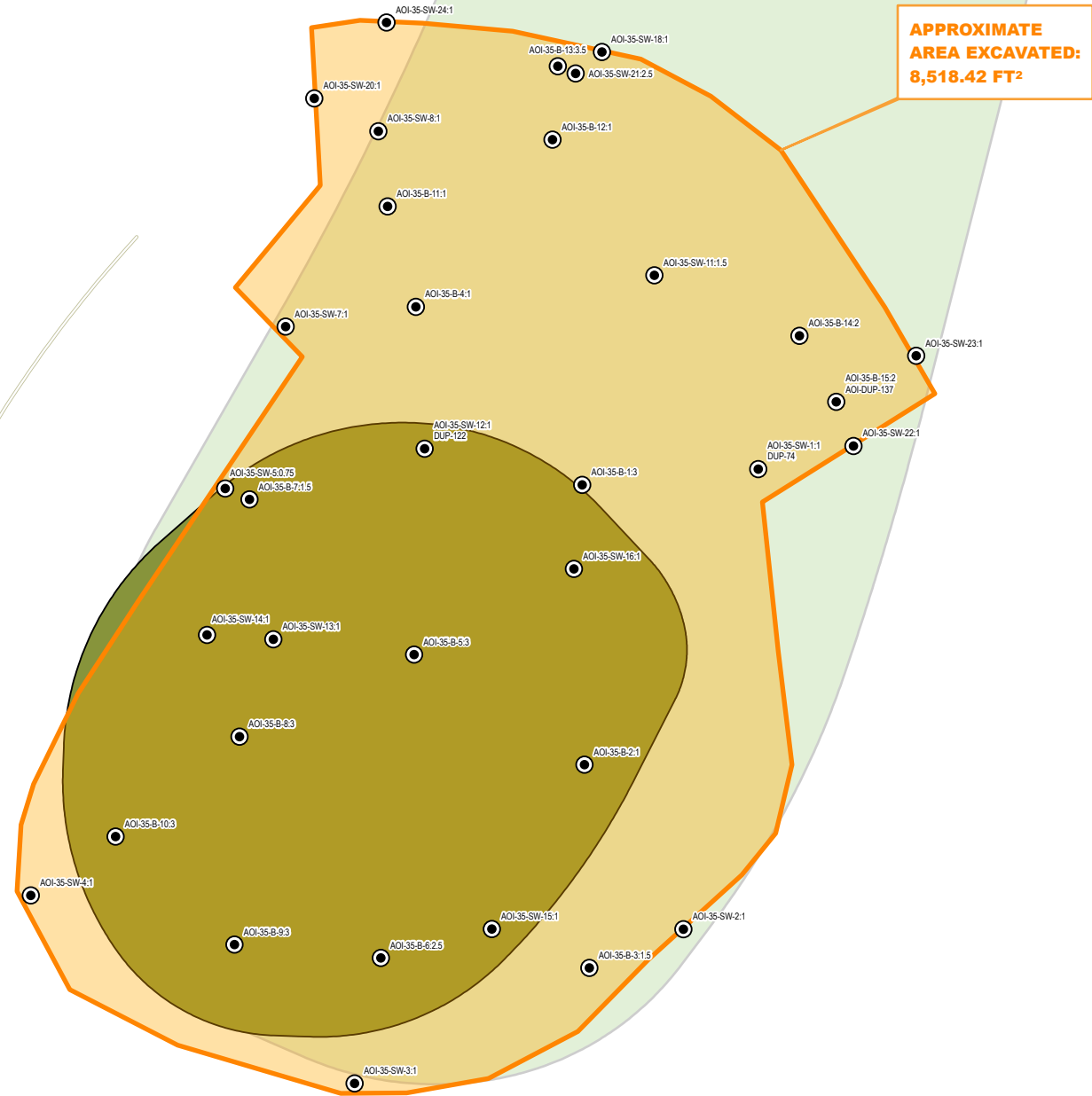
NOTES:

- APPROXIMATE SAMPLE LOCATION
- INDICATES DIELDRIN DETECTED IN PERFORMANCE SAMPLE AT CONCENTRATION GREATER THAN MTCA METHOD B (CANCER) SOIL CLEANUP LEVEL (0.0625 mg/kg)
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- FORMER GOLF COURSE GREEN
- FORMER GOLF COURSE HOLE

20 10 0 20

APPROXIMATE SCALE : 1" = 20'

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



TRC

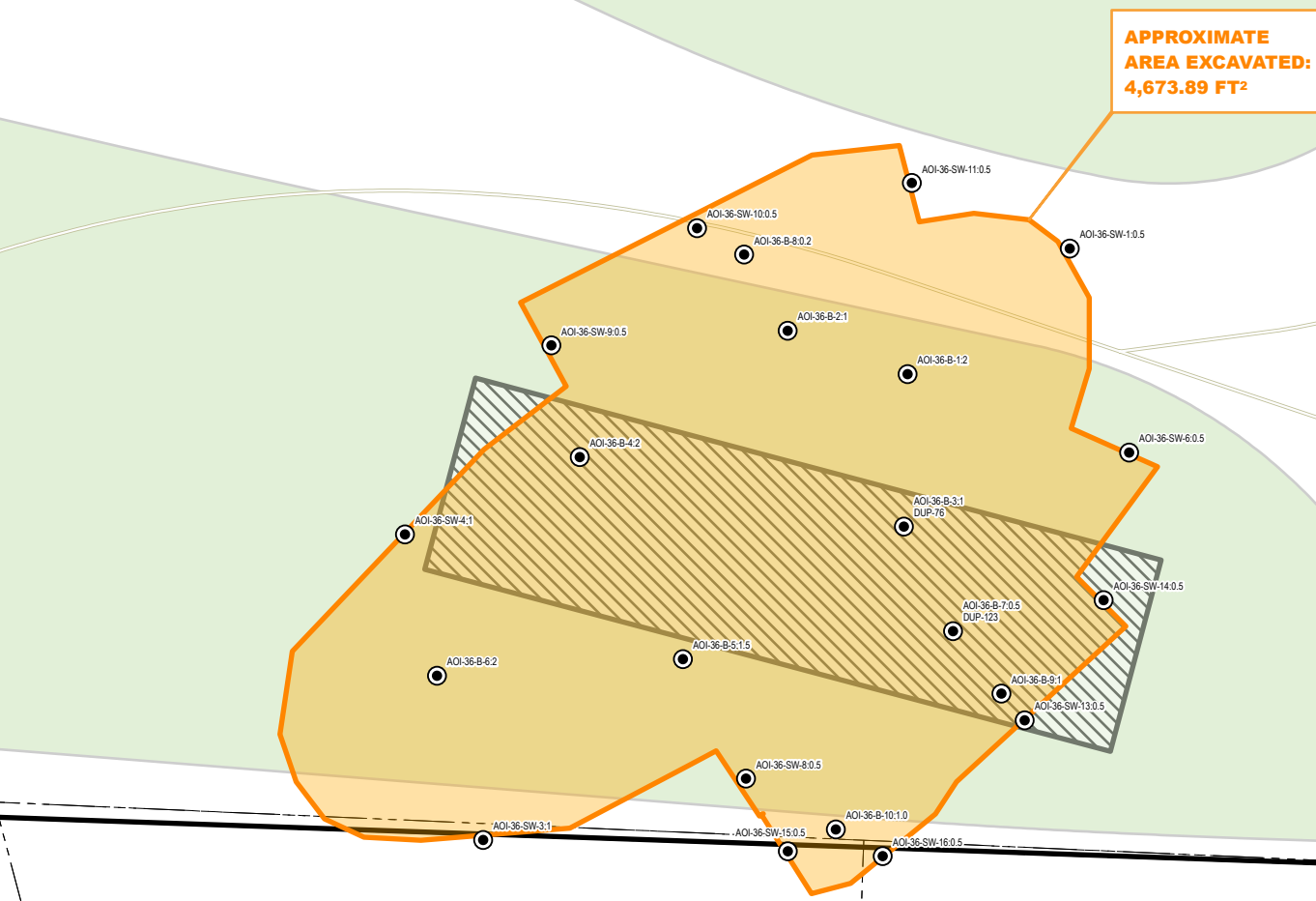
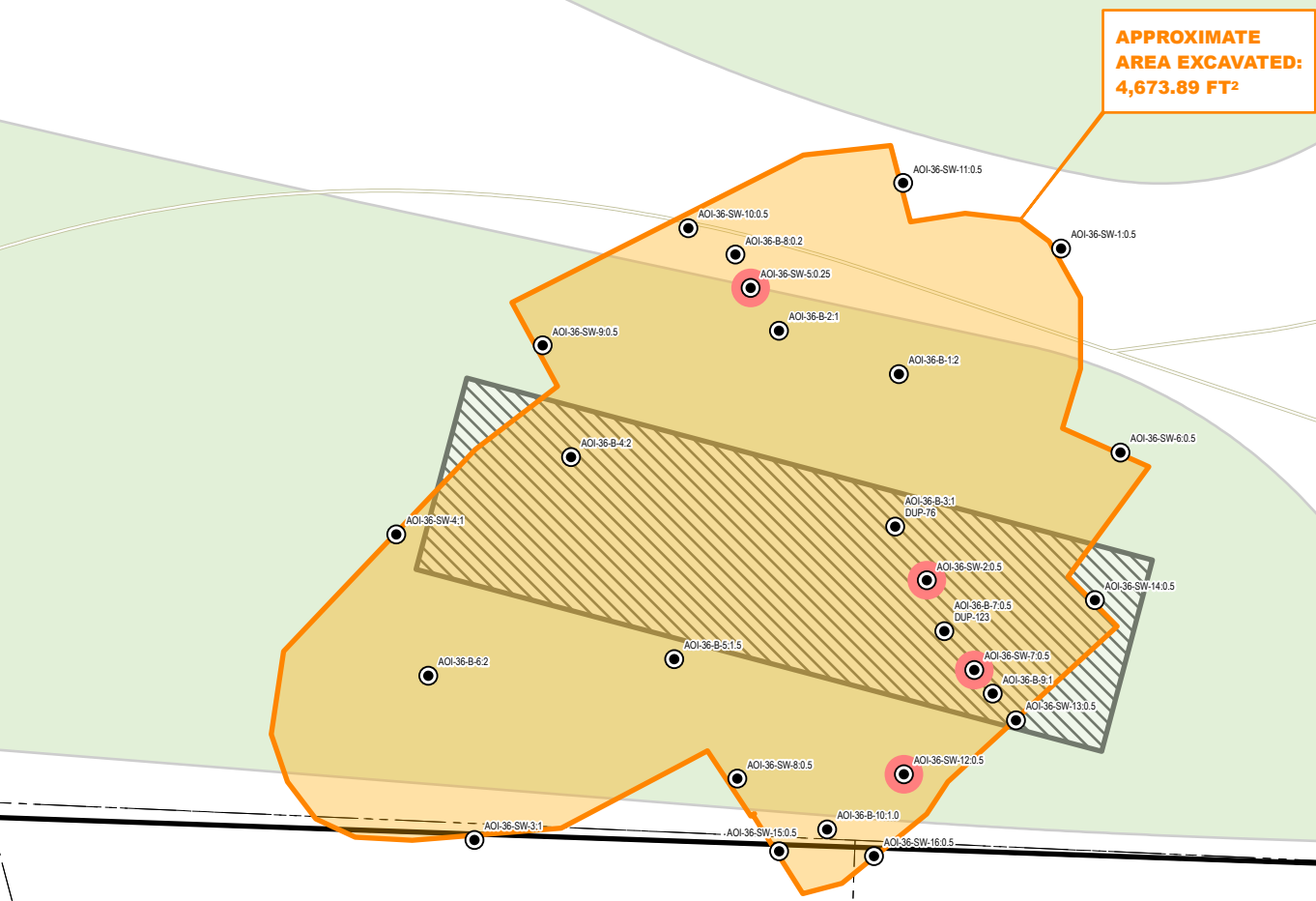
1180 NW MAPLE ST, SUITE 310
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FIGURE 38
REMEDIAL EXCAVATION - AOI-35

REPORT CLEANUP ACTION REPORT	PREPARED FOR ICHIJO USA CO., LTD.
	PROJECT NUMBER 430733.0000.0000
LOCATION 1802 BROOKDALE ROAD EAST TACOMA, WASHINGTON	DATE 6/22/22 DRAWN BY KPC REVIEWED BY ND

REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



NOTES:

- APPROXIMATE SAMPLE LOCATION
- INDICATES DIELDRIN DETECTED IN PERFORMANCE SAMPLE AT CONCENTRATION GREATER THAN MTCA METHOD B (CANCER) SOIL CLEANUP LEVEL (0.0625 mg/kg)
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- ▨ FORMER GOLF COURSE TEE BOX
- FORMER GOLF COURSE GREEN
- FORMER GOLF COURSE HOLE

20 10 0 20

APPROXIMATE SCALE : 1" = 20'



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FIGURE 39
REMEDIAL EXCAVATION - AOI-36

REPORT
CLEANUP ACTION REPORT

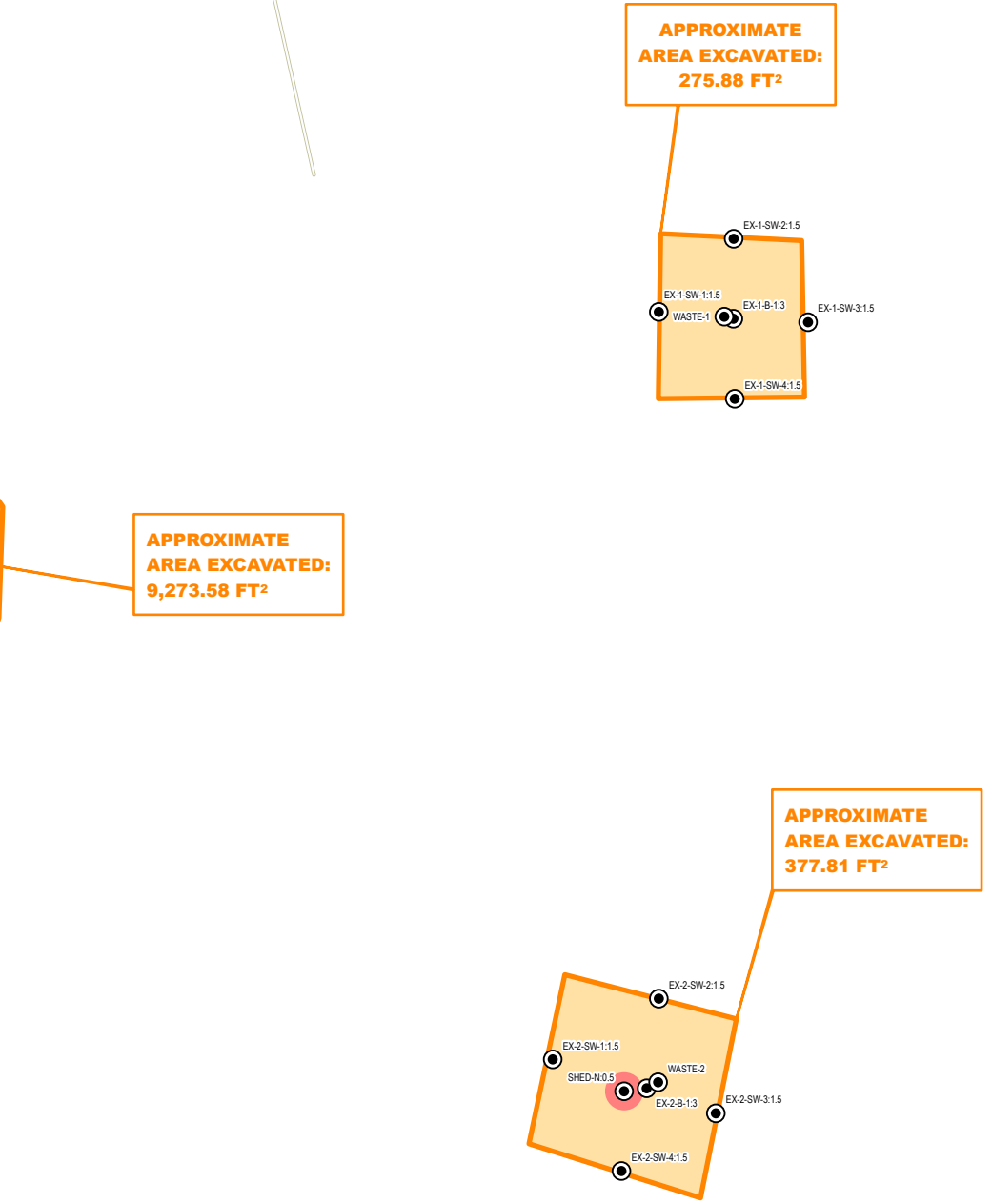
PREPARED FOR
ICHIJO USA CO., LTD.

PROJECT NUMBER
430733.0000.0000

LOCATION
1802 BROOKDALE ROAD EAST
TACOMA, WASHINGTON

DATE 6/22/22
DRAWN BY KPC
REVIEWED BY ND

REMEDIAL EXCAVATION AND ALL PERFORMANCE SAMPLES



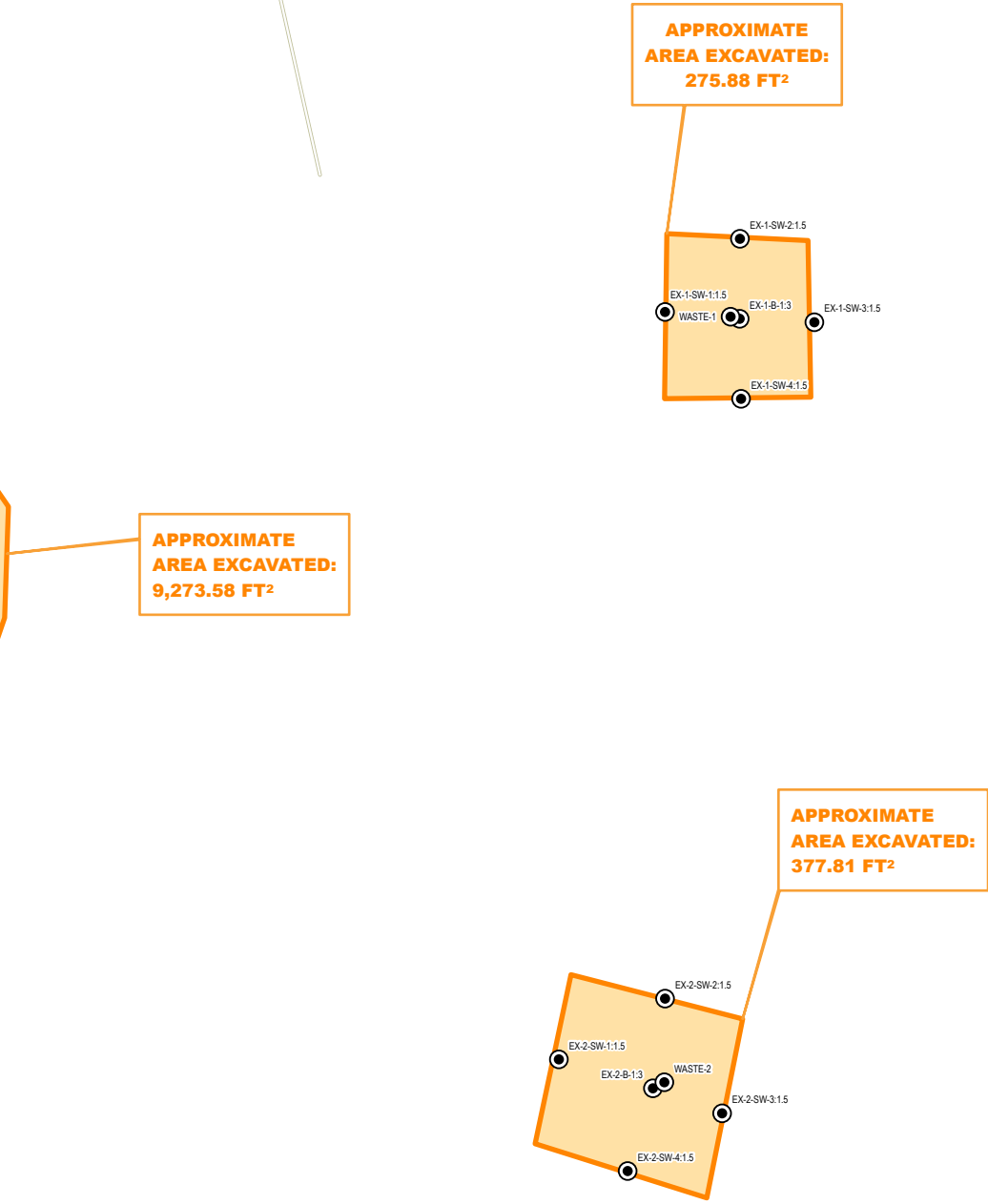
NOTES:

- APPROXIMATE SAMPLE LOCATION
- INDICATES DIELDRIN DETECTED IN PERFORMANCE SAMPLE AT CONCENTRATION GREATER THAN MTCA METHOD B (CANCER) SOIL CLEANUP LEVEL (0.0625 mg/kg)
- APPROXIMATE LIMITS OF REMEDIAL EXCAVATION
- ▨ FORMER GOLF COURSE TEE BOX
- ◡ FORMER GOLF COURSE HOLE

20 10 0 20

APPROXIMATE SCALE : 1" = 20'

REMEDIAL EXCAVATION AND ALL CONFIRMATION SAMPLES



APPROXIMATE AREA EXCAVATED: 17,192.75 FT²

AOI-27-SW-11:0.8
DUP-60

TRC 1180 NW MAPLE ST, SUITE 310
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FIGURE 40
REMEDIAL EXCAVATION - MAINTENANCE
COMPOUND

REPORT CLEANUP ACTION REPORT	PREPARED FOR ICHIJO USA CO., LTD.
	PROJECT NUMBER 430733.0000.0000
LOCATION 1802 BROOKDALE ROAD EAST TACOMA, WASHINGTON	DATE 6/22/22 DRAWN BY KPC REVIEWED BY ND

Attachment A
2016 Robinson Noble Limited Pesticide
Investigation Letter Report and
Laboratory Analytical Results



December 14, 2016

Paul Green
Azure Green Consultants
409 East Pioneer
Puyallup WA 98372

Subject: Limited Pesticide Investigation – Brookdale Golf Course, 1802 Brookdale Road East,
Tacoma, Washington

Dear Paul,

Robinson Noble is pleased to present this letter documenting the limited soil investigation to evaluate the presence or absence of organochlorine pesticides and herbicides. This limited evaluation is intended to assess selected areas for impacts related to its use as a golf course.

This study was limited to the collection of three soil samples, including two from the maintenance/ area (underneath the pesticide spray system and by the waste oil storage area) and one from the practice green close to the clubhouse. The soil samples were collected from approximately six below the surface using a stainless-steel hand auger. The collected soil samples were placed into laboratory-provided pre-cleaned containers, preserved as appropriate, and transported to the project laboratory under chain-of-custody.

Laboratory analysis were completed using EPA Method 8151 modified for herbicides and EPA Method 8081 for organochlorine pesticides. Libby Environmental, Inc., performed these analyses under subcontract to us.

As we discussed on the phone today, laboratory analysis for herbicides did not identify any compounds above laboratory detection limits. However, testing for organochlorine pesticides identified one compound, dieldrin, above laboratory detection limits.

We compared the laboratory reported concentrations to Washington Model Toxics Control Act (MTCA) for unrestricted (residential) land use. There are two cleanup limit values for dieldrin in soils. The first value is for non-carcinogenic exposures and the second one is for carcinogenic exposures. For residential exposures, especially in initial screening investigations such as this the carcinogenic exposure value is usually the most appropriate for comparison.

Table 1 below summarizes the dieldrin concentrations and the cleanup limits. You will note that each of the three samples is fairly close to the carcinogenic cleanup limit and well below the non-carcinogenic cleanup limit. This limited data does not suggest a severe issue with pesticides but the exceedance of the MTCA cleanup limit for carcinogenic exposures may present issues with future use of the subject for residential uses

Table 1

Sample Identification	Location	Dieldrin Concentration (mg/Kg)
BGC-1M	Below spray tank	0.0939
BGC-2M	Next to waste oil drum	0.111
BGC-3G	Practice green	0.0956
MTCA Method A Carcinogenic		0.0625
MTCA Method A Non-Carcinogenic		4.00

Bold denotes MTCA Method A Carcinogenic Exposure Cleanup Limit exceeded.

Considering your planned future use of the site additional investigation appropriate to more clearly define the nature of pesticide residuals. Once that is done, it will be possible evaluate the actions needed to address any pesticide concentrations above cleanup limits and proceed with redevelopment. It is just as likely that significant cleanup will not be needed compared to the chance that substantial efforts would be required for redevelopment.

We are currently working on preparing a cost estimate to complete this characterization. Our estimate will include collecting samples from 0-12 inches in depth and 18-24 inches in depth from each green and a sample from 0-12 inches from each fairway. The investigation will also evaluate near surface groundwater quality in five locations. Based on the data discussed in this letter our analyses will focus on organochlorine pesticides only.

I will forward the cost estimate tomorrow as soon as it is complete. If you have questions or need additional information, please contact us. Thank you for the opportunity to be of service.

Sincerely,
Robinson Noble, Inc.



John F. Hildenbrand
Principal Environmental Scientist



Fremont
Analytical

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Libby Environmental
Sherry Chilcutt
4139 Libby Rd. NE
Olympia, WA 98506

RE: Azure-Green-Brookdale
Work Order Number: 1612045

December 14, 2016

Attention Sherry Chilcutt:

Fremont Analytical, Inc. received 3 sample(s) on 12/5/2016 for the analyses presented in the following report.

Herbicides by EPA Method 8151A
Organochlorine Pesticides by EPA Method 8081
Sample Moisture (Percent Moisture)

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Chelsea Ward
Project Manager

DoD/ELAP Certification #L2371, ISO/IEC 17025:2005
ORELAP Certification: WA 100009-007 (NELAP Recognized)



Date: 12/14/2016

CLIENT: Libby Environmental
Project: Azure-Green-Brookdale
Work Order: 1612045

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1612045-001	BGC-1M	12/01/2016 2:05 PM	12/05/2016 2:00 PM
1612045-002	BGC-2M	12/01/2016 2:09 PM	12/05/2016 2:00 PM
1612045-003	BGC-3G	12/01/2016 2:20 PM	12/05/2016 2:00 PM

CLIENT: Libby Environmental
Project: Azure-Green-Brookdale

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 1612045

Date Reported: 12/14/2016

Client: Libby Environmental

Collection Date: 12/1/2016 2:05:00 PM

Project: Azure-Green-Brookdale

Lab ID: 1612045-001

Matrix: Soil

Client Sample ID: BGC-1M

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organochlorine Pesticides by EPA Method 8081

Batch ID: 15639

Analyst: EM

Toxaphene	ND	0.117		mg/Kg-dry	1	12/14/2016 8:48:00 AM
Alpha BHC	ND	0.0117		mg/Kg-dry	1	12/14/2016 8:48:00 AM
Beta BHC	ND	0.0117		mg/Kg-dry	1	12/14/2016 8:48:00 AM
Gamma BHC (Lindane)	ND	0.0117		mg/Kg-dry	1	12/14/2016 8:48:00 AM
Delta BHC	ND	0.0117		mg/Kg-dry	1	12/14/2016 8:48:00 AM
Heptachlor	ND	0.0117		mg/Kg-dry	1	12/14/2016 8:48:00 AM
Aldrin	ND	0.0117		mg/Kg-dry	1	12/14/2016 8:48:00 AM
Heptachlor epoxide	ND	0.0117		mg/Kg-dry	1	12/14/2016 8:48:00 AM
gamma-Chlordane	ND	0.0117		mg/Kg-dry	1	12/14/2016 8:48:00 AM
Endosulfan I	ND	0.0117		mg/Kg-dry	1	12/14/2016 8:48:00 AM
alpha-Chlordane	ND	0.0117		mg/Kg-dry	1	12/14/2016 8:48:00 AM
Dieldrin	0.0939	0.0117		mg/Kg-dry	1	12/14/2016 8:48:00 AM
4,4'-DDE	ND	0.0233		mg/Kg-dry	1	12/14/2016 8:48:00 AM
Endrin	ND	0.0233		mg/Kg-dry	1	12/14/2016 8:48:00 AM
Endosulfan II	ND	0.0233		mg/Kg-dry	1	12/14/2016 8:48:00 AM
4,4'-DDD	ND	0.0233		mg/Kg-dry	1	12/14/2016 8:48:00 AM
Endrin aldehyde	ND	0.0233		mg/Kg-dry	1	12/14/2016 8:48:00 AM
Endosulfan sulfate	ND	0.0233		mg/Kg-dry	1	12/14/2016 8:48:00 AM
4,4'-DDT	ND	0.0233		mg/Kg-dry	1	12/14/2016 8:48:00 AM
Endrin ketone	ND	0.0233		mg/Kg-dry	1	12/14/2016 8:48:00 AM
Methoxychlor	ND	0.0583		mg/Kg-dry	1	12/14/2016 8:48:00 AM
Surr: Decachlorobiphenyl	106	17.8-157		%Rec	1	12/14/2016 8:48:00 AM
Surr: Tetrachloro-m-xylene	95.2	11-150		%Rec	1	12/14/2016 8:48:00 AM

Herbicides by EPA Method 8151A

Batch ID: 15643

Analyst: SG

Dicamba	ND	37.5		µg/Kg-dry	1	12/13/2016 10:59:43 PM
2,4-D	ND	32.1		µg/Kg-dry	1	12/13/2016 10:59:43 PM
2,4-DP	ND	26.8		µg/Kg-dry	1	12/13/2016 10:59:43 PM
2,4,5-TP (Silvex)	ND	21.4		µg/Kg-dry	1	12/13/2016 10:59:43 PM
2,4,5-T	ND	53.5		µg/Kg-dry	1	12/13/2016 10:59:43 PM
Dinoseb	ND	32.1	Q	µg/Kg-dry	1	12/13/2016 10:59:43 PM
Dalapon	ND	214		µg/Kg-dry	1	12/13/2016 10:59:43 PM
2,4-DB	ND	26.8		µg/Kg-dry	1	12/13/2016 10:59:43 PM
MCPP	ND	4,710		µg/Kg-dry	1	12/13/2016 10:59:43 PM
MCPA	ND	3,000		µg/Kg-dry	1	12/13/2016 10:59:43 PM
Picloram	ND	53.5		µg/Kg-dry	1	12/13/2016 10:59:43 PM
Bentazon	ND	37.5		µg/Kg-dry	1	12/13/2016 10:59:43 PM
Chloramben	ND	21.4		µg/Kg-dry	1	12/13/2016 10:59:43 PM

Original



Analytical Report

Work Order: 1612045
Date Reported: 12/14/2016

Client: Libby Environmental
Project: Azure-Green-Brookdale
Lab ID: 1612045-001
Client Sample ID: BGC-1M

Collection Date: 12/1/2016 2:05:00 PM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Herbicides by EPA Method 8151A</u>				Batch ID: 15643		Analyst: SG
Acifluorfen	ND	85.7	Q	µg/Kg-dry	1	12/13/2016 10:59:43 PM
3,5-Dichlorobenzoic acid	ND	42.8		µg/Kg-dry	1	12/13/2016 10:59:43 PM
4-Nitrophenol	ND	32.1		µg/Kg-dry	1	12/13/2016 10:59:43 PM
Dacthal (DCPA)	ND	32.1		µg/Kg-dry	1	12/13/2016 10:59:43 PM
Surr: 2,4-Dichlorophenylacetic acid	2.64	20.1-168	S	%Rec	1	12/13/2016 10:59:43 PM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

S - Outlying surrogate recovery(ies) observed.

<u>Sample Moisture (Percent Moisture)</u>				Batch ID: R33229		Analyst: BB
Percent Moisture	16.6	0.500		wt%	1	12/6/2016 8:15:05 AM



Analytical Report

Work Order: 1612045

Date Reported: 12/14/2016

Client: Libby Environmental

Collection Date: 12/1/2016 2:09:00 PM

Project: Azure-Green-Brookdale

Lab ID: 1612045-002

Matrix: Soil

Client Sample ID: BGC-2M

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organochlorine Pesticides by EPA Method 8081

Batch ID: 15639

Analyst: EM

Toxaphene	ND	0.120		mg/Kg-dry	1	12/14/2016 9:44:00 AM
Alpha BHC	ND	0.0120		mg/Kg-dry	1	12/14/2016 9:44:00 AM
Beta BHC	ND	0.0120		mg/Kg-dry	1	12/14/2016 9:44:00 AM
Gamma BHC (Lindane)	ND	0.0120		mg/Kg-dry	1	12/14/2016 9:44:00 AM
Delta BHC	ND	0.0120		mg/Kg-dry	1	12/14/2016 9:44:00 AM
Heptachlor	ND	0.0120		mg/Kg-dry	1	12/14/2016 9:44:00 AM
Aldrin	ND	0.0120		mg/Kg-dry	1	12/14/2016 9:44:00 AM
Heptachlor epoxide	ND	0.0120		mg/Kg-dry	1	12/14/2016 9:44:00 AM
gamma-Chlordane	ND	0.0120		mg/Kg-dry	1	12/14/2016 9:44:00 AM
Endosulfan I	ND	0.0120		mg/Kg-dry	1	12/14/2016 9:44:00 AM
alpha-Chlordane	ND	0.0120		mg/Kg-dry	1	12/14/2016 9:44:00 AM
Dieldrin	0.111	0.0120		mg/Kg-dry	1	12/14/2016 9:44:00 AM
4,4'-DDE	ND	0.0241		mg/Kg-dry	1	12/14/2016 9:44:00 AM
Endrin	ND	0.0241		mg/Kg-dry	1	12/14/2016 9:44:00 AM
Endosulfan II	ND	0.0241		mg/Kg-dry	1	12/14/2016 9:44:00 AM
4,4'-DDD	ND	0.0241		mg/Kg-dry	1	12/14/2016 9:44:00 AM
Endrin aldehyde	ND	0.0241		mg/Kg-dry	1	12/14/2016 9:44:00 AM
Endosulfan sulfate	ND	0.0241		mg/Kg-dry	1	12/14/2016 9:44:00 AM
4,4'-DDT	ND	0.0241		mg/Kg-dry	1	12/14/2016 9:44:00 AM
Endrin ketone	ND	0.0241		mg/Kg-dry	1	12/14/2016 9:44:00 AM
Methoxychlor	ND	0.0602		mg/Kg-dry	1	12/14/2016 9:44:00 AM
Surr: Decachlorobiphenyl	102	17.8-157		%Rec	1	12/14/2016 9:44:00 AM
Surr: Tetrachloro-m-xylene	92.3	11-150		%Rec	1	12/14/2016 9:44:00 AM

Herbicides by EPA Method 8151A

Batch ID: 15643

Analyst: SG

Dicamba	ND	42.5		µg/Kg-dry	1	12/13/2016 9:23:53 PM
2,4-D	ND	36.5		µg/Kg-dry	1	12/13/2016 9:23:53 PM
2,4-DP	ND	30.4		µg/Kg-dry	1	12/13/2016 9:23:53 PM
2,4,5-TP (Silvex)	ND	24.3		µg/Kg-dry	1	12/13/2016 9:23:53 PM
2,4,5-T	ND	60.8		µg/Kg-dry	1	12/13/2016 9:23:53 PM
Dinoseb	ND	36.5	Q	µg/Kg-dry	1	12/13/2016 9:23:53 PM
Dalapon	ND	243		µg/Kg-dry	1	12/13/2016 9:23:53 PM
2,4-DB	ND	30.4		µg/Kg-dry	1	12/13/2016 9:23:53 PM
MCPP	ND	5,350		µg/Kg-dry	1	12/13/2016 9:23:53 PM
MCPA	ND	3,400		µg/Kg-dry	1	12/13/2016 9:23:53 PM
Picloram	ND	60.8		µg/Kg-dry	1	12/13/2016 9:23:53 PM
Bentazon	ND	42.5		µg/Kg-dry	1	12/13/2016 9:23:53 PM
Chloramben	ND	24.3		µg/Kg-dry	1	12/13/2016 9:23:53 PM

Original



Analytical Report

Work Order: 1612045
Date Reported: 12/14/2016

Client: Libby Environmental
Project: Azure-Green-Brookdale
Lab ID: 1612045-002
Client Sample ID: BGC-2M

Collection Date: 12/1/2016 2:09:00 PM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Herbicides by EPA Method 8151A</u>				Batch ID: 15643		Analyst: SG
Acifluorfen	ND	97.2	Q	µg/Kg-dry	1	12/13/2016 9:23:53 PM
3,5-Dichlorobenzoic acid	ND	48.6		µg/Kg-dry	1	12/13/2016 9:23:53 PM
4-Nitrophenol	ND	36.5		µg/Kg-dry	1	12/13/2016 9:23:53 PM
Dacthal (DCPA)	ND	36.5		µg/Kg-dry	1	12/13/2016 9:23:53 PM
Surr: 2,4-Dichlorophenylacetic acid	2.25	20.1-168	S	%Rec	1	12/13/2016 9:23:53 PM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

S - Outlying surrogate recovery(ies) observed.

<u>Sample Moisture (Percent Moisture)</u>				Batch ID: R33229		Analyst: BB
Percent Moisture	20.0	0.500		wt%	1	12/6/2016 8:15:05 AM



Analytical Report

Work Order: 1612045

Date Reported: 12/14/2016

Client: Libby Environmental

Collection Date: 12/1/2016 2:20:00 PM

Project: Azure-Green-Brookdale

Lab ID: 1612045-003

Matrix: Soil

Client Sample ID: BGC-3G

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organochlorine Pesticides by EPA Method 8081

Batch ID: 15639

Analyst: EM

Toxaphene	ND	0.117		mg/Kg-dry	1	12/14/2016 9:55:00 AM
Alpha BHC	ND	0.0117		mg/Kg-dry	1	12/14/2016 9:55:00 AM
Beta BHC	ND	0.0117		mg/Kg-dry	1	12/14/2016 9:55:00 AM
Gamma BHC (Lindane)	ND	0.0117		mg/Kg-dry	1	12/14/2016 9:55:00 AM
Delta BHC	ND	0.0117		mg/Kg-dry	1	12/14/2016 9:55:00 AM
Heptachlor	ND	0.0117		mg/Kg-dry	1	12/14/2016 9:55:00 AM
Aldrin	ND	0.0117		mg/Kg-dry	1	12/14/2016 9:55:00 AM
Heptachlor epoxide	ND	0.0117		mg/Kg-dry	1	12/14/2016 9:55:00 AM
gamma-Chlordane	ND	0.0117		mg/Kg-dry	1	12/14/2016 9:55:00 AM
Endosulfan I	ND	0.0117		mg/Kg-dry	1	12/14/2016 9:55:00 AM
alpha-Chlordane	ND	0.0117		mg/Kg-dry	1	12/14/2016 9:55:00 AM
Dieldrin	0.0956	0.0117		mg/Kg-dry	1	12/14/2016 9:55:00 AM
4,4'-DDE	ND	0.0235		mg/Kg-dry	1	12/14/2016 9:55:00 AM
Endrin	ND	0.0235		mg/Kg-dry	1	12/14/2016 9:55:00 AM
Endosulfan II	ND	0.0235		mg/Kg-dry	1	12/14/2016 9:55:00 AM
4,4'-DDD	ND	0.0235		mg/Kg-dry	1	12/14/2016 9:55:00 AM
Endrin aldehyde	ND	0.0235		mg/Kg-dry	1	12/14/2016 9:55:00 AM
Endosulfan sulfate	ND	0.0235		mg/Kg-dry	1	12/14/2016 9:55:00 AM
4,4'-DDT	ND	0.0235		mg/Kg-dry	1	12/14/2016 9:55:00 AM
Endrin ketone	ND	0.0235		mg/Kg-dry	1	12/14/2016 9:55:00 AM
Methoxychlor	ND	0.0587		mg/Kg-dry	1	12/14/2016 9:55:00 AM
Surr: Decachlorobiphenyl	117	17.8-157		%Rec	1	12/14/2016 9:55:00 AM
Surr: Tetrachloro-m-xylene	94.4	11-150		%Rec	1	12/14/2016 9:55:00 AM

Herbicides by EPA Method 8151A

Batch ID: 15643

Analyst: SG

Dicamba	ND	41.4		µg/Kg-dry	1	12/13/2016 10:40:33 PM
2,4-D	ND	35.5		µg/Kg-dry	1	12/13/2016 10:40:33 PM
2,4-DP	ND	29.6		µg/Kg-dry	1	12/13/2016 10:40:33 PM
2,4,5-TP (Silvex)	ND	23.7		µg/Kg-dry	1	12/13/2016 10:40:33 PM
2,4,5-T	ND	59.2		µg/Kg-dry	1	12/13/2016 10:40:33 PM
Dinoseb	ND	35.5	Q	µg/Kg-dry	1	12/13/2016 10:40:33 PM
Dalapon	ND	237		µg/Kg-dry	1	12/13/2016 10:40:33 PM
2,4-DB	ND	29.6		µg/Kg-dry	1	12/13/2016 10:40:33 PM
MCPP	ND	5,210		µg/Kg-dry	1	12/13/2016 10:40:33 PM
MCPA	ND	3,310		µg/Kg-dry	1	12/13/2016 10:40:33 PM
Picloram	ND	59.2		µg/Kg-dry	1	12/13/2016 10:40:33 PM
Bentazon	ND	41.4		µg/Kg-dry	1	12/13/2016 10:40:33 PM
Chloramben	ND	23.7		µg/Kg-dry	1	12/13/2016 10:40:33 PM

Original



Analytical Report

Work Order: 1612045
Date Reported: 12/14/2016

Client: Libby Environmental
Project: Azure-Green-Brookdale
Lab ID: 1612045-003
Client Sample ID: BGC-3G

Collection Date: 12/1/2016 2:20:00 PM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Herbicides by EPA Method 8151A</u>				Batch ID: 15643	Analyst: SG	
Acifluorfen	ND	94.6	Q	µg/Kg-dry	1	12/13/2016 10:40:33 PM
3,5-Dichlorobenzoic acid	ND	47.3		µg/Kg-dry	1	12/13/2016 10:40:33 PM
4-Nitrophenol	ND	35.5		µg/Kg-dry	1	12/13/2016 10:40:33 PM
Dacthal (DCPA)	ND	35.5		µg/Kg-dry	1	12/13/2016 10:40:33 PM
Surr: 2,4-Dichlorophenylacetic acid	84.5	20.1-168		%Rec	1	12/13/2016 10:40:33 PM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Sample Moisture (Percent Moisture)

Batch ID: R33229 Analyst: BB

Percent Moisture	20.9	0.500	wt%	1	12/6/2016 8:15:05 AM
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Date: 12/14/2016

Work Order: 1612045
CLIENT: Libby Environmental
Project: Azure-Green-Brookdale

QC SUMMARY REPORT

Herbicides by EPA Method 8151A

Sample ID	MB-15643	SampType: MBLK		Units: µg/Kg		Prep Date: 12/8/2016			RunNo: 33383		
Client ID:	MBLKS	Batch ID: 15643		Analysis Date: 12/13/2016					SeqNo: 633421		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dicamba	ND	35.0									
2,4-D	ND	30.0									
2,4-DP	ND	25.0									
2,4,5-TP (Silvex)	ND	20.0									
2,4,5-T	ND	50.0									
Dinoseb	ND	30.0									Q
Dalapon	ND	200									
2,4-DB	ND	25.0									
MCPP	ND	4,400									
MCPA	ND	2,800									
Picloram	ND	50.0									
Bentazon	ND	35.0									
Chloramben	ND	20.0									
Acifluorfen	ND	80.0									Q
3,5-Dichlorobenzoic acid	ND	40.0									
4-Nitrophenol	ND	30.0									
Dacthal (DCPA)	ND	30.0									
Surr: 2,4-Dichlorophenylacetic acid	1,470		1,000		147	20.1	168				

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Sample ID	LCS-15643	SampType:	LCS	Units:	µg/Kg	Prep Date:	12/8/2016	RunNo:	33383		
Client ID:	LCSS	Batch ID:	15643	Analysis Date:				12/13/2016	SeqNo:	633413	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dicamba	237	35.0	200.0	0	119	24.7	141				
2,4-D	249	30.0	200.0	0	125	22.4	130				
2,4-DP	249	25.0	200.0	0	124	26.4	130				
2,4,5-TP (Silvex)	233	20.0	200.0	0	117	21.2	138				
2,4,5-T	238	50.0	200.0	0	119	22.8	144				
Dinoseb	112	30.0	200.0	0	56.2	5	165				



Date: 12/14/2016

Work Order: 1612045
CLIENT: Libby Environmental
Project: Azure-Green-Brookdale

QC SUMMARY REPORT
Herbicides by EPA Method 8151A

Sample ID	LCS-15643	SampType:	LCS	Units:	µg/Kg	Prep Date:	12/8/2016	RunNo:	33383		
Client ID:	LCSS	Batch ID:	15643			Analysis Date:	12/13/2016	SeqNo:	633413		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dalapon	1,490	200	1,000	0	149	18.4	162				
2,4-DB	246	25.0	200.0	0	123	5	164				
MCP	972	4,400	1,000	0	97.2	22.2	157				
MCPA	1031	2,800	1,000	0	103	47.4	128				
Picloram	231	50.0	200.0	0	116	5	175				
Bentazon	242	35.0	200.0	0	121	7.59	162				
Chloramben	116	20.0	200.0	0	57.8	5	147				
Acifluorfen	155	80.0	200.0	0	77.3	5	163				
3,5-Dichlorobenzoic acid	222	40.0	200.0	0	111	18.7	139				
4-Nitrophenol	206	30.0	200.0	0	103	5	163				
Dacthal (DCPA)	266	30.0	200.0	0	133	5	164				
Surr: 2,4-Dichlorophenylacetic acid	1,300		1,000		130	20.1	168				

Sample ID	1612045-002ADUP	SampType:	DUP	Units:	µg/Kg-dry	Prep Date:	12/8/2016	RunNo:	33383		
Client ID:	BGC-2M	Batch ID:	15643			Analysis Date:	12/13/2016	SeqNo:	633415		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dicamba	ND	43.2						0		30	
2,4-D	ND	37.0						0		30	
2,4-DP	ND	30.9						0		30	
2,4,5-TP (Silvex)	ND	24.7						0		30	
2,4,5-T	ND	61.7						0		30	
Dinoseb	ND	37.0						0		30	Q
Dalapon	ND	247						0		30	
2,4-DB	ND	30.9						0		30	
MCP	ND	5,430						0		30	
MCPA	ND	3,460						0		30	
Picloram	ND	61.7						0		30	
Bentazon	ND	43.2						0		30	
Chloramben	ND	24.7						0		30	



Date: 12/14/2016

Work Order: 1612045
CLIENT: Libby Environmental
Project: Azure-Green-Brookdale

QC SUMMARY REPORT
Herbicides by EPA Method 8151A

Sample ID	1612045-002ADUP	SampType:	DUP	Units:	µg/Kg-dry	Prep Date:	12/8/2016	RunNo:	33383		
Client ID:	BGC-2M	Batch ID:	15643			Analysis Date:	12/13/2016	SeqNo:	633415		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acifluorfen	ND	98.7						0		30	Q
3,5-Dichlorobenzoic acid	ND	49.4						0		30	
4-Nitrophenol	ND	37.0						0		30	
Dacthal (DCPA)	ND	37.0						0		30	
Surr: 2,4-Dichlorophenylacetic acid	60.1		1,234		4.87	20.1	168		0		S

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

S - Outlying surrogate recovery(ies) observed.

Sample ID	1612045-002AMS	SampType:	MS	Units:	µg/Kg-dry	Prep Date:	12/8/2016	RunNo:	33383		
Client ID:	BGC-2M	Batch ID:	15643			Analysis Date:	12/13/2016	SeqNo:	633416		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dicamba	212	42.0	240.0	0	88.4	31.9	118				
2,4-D	239	36.0	240.0	0	99.7	12.4	134				
2,4-DP	228	30.0	240.0	0	94.9	27.2	129				
2,4,5-TP (Silvex)	218	24.0	240.0	0	90.8	28.6	134				
2,4,5-T	238	60.0	240.0	0	99.2	13.1	147				
Dinoseb	61.8	36.0	240.0	0	25.8	10	179				
Dalapon	1,500	240	1,200	0	125	24.9	139				
2,4-DB	270	30.0	240.0	0	113	50.2	152				
MCPP	937	5,280	1,200	0	78.1	37.8	140				
MCPA	969	3,360	1,200	0	80.7	13.7	147				
Picloram	220	60.0	240.0	0	91.7	5	153				
Bentazon	213	42.0	240.0	0	88.9	15	140				
Chloramben	90.2	24.0	240.0	0	37.6	5	162				
Acifluorfen	47.1	96.0	240.0	0	19.6	15	140				
3,5-Dichlorobenzoic acid	193	48.0	240.0	0	80.6	10	164				
4-Nitrophenol	173	36.0	240.0	0	71.9	44.8	125				
Dacthal (DCPA)	222	36.0	240.0	0	92.4	5	132				
Surr: 2,4-Dichlorophenylacetic acid	1,130		1,200		94.0	20.1	168				



Date: 12/14/2016

Work Order: 1612045
CLIENT: Libby Environmental
Project: Azure-Green-Brookdale

QC SUMMARY REPORT
Herbicides by EPA Method 8151A

Sample ID	1612045-002AMS	SampType:	MS	Units:	µg/Kg-dry	Prep Date:	12/8/2016	RunNo:	33383		
Client ID:	BGC-2M	Batch ID:	15643			Analysis Date:	12/13/2016	SeqNo:	633416		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID	1612045-002AMSD	SampType:	MSD	Units:	µg/Kg-dry	Prep Date:	12/8/2016	RunNo:	33383		
Client ID:	BGC-2M	Batch ID:	15643			Analysis Date:	12/13/2016	SeqNo:	633417		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dicamba	250	42.3	241.6	0	104	31.9	118	212.1	16.6	30	
2,4-D	273	36.2	241.6	0	113	12.4	134	239.2	13.3	30	
2,4-DP	269	30.2	241.6	0	111	27.2	129	227.7	16.5	30	
2,4,5-TP (Silvex)	260	24.2	241.6	0	108	28.6	134	217.9	17.5	30	
2,4,5-T	278	60.4	241.6	0	115	13.1	147	238.1	15.6	30	
Dinoseb	56.5	36.2	241.6	0	23.4	10	179	61.85	8.95	30	
Dalapon	1,490	242	1,208	0	124	24.9	139	1,501	0.489	30	
2,4-DB	302	30.2	241.6	0	125	50.2	152	270.2	11.2	30	
MCP	1164	5,320	1,208	0	96.4	37.8	140	0		30	
MCPA	1226	3,380	1,208	0	101	13.7	147	0		30	
Picloram	237	60.4	241.6	0	97.9	5	153	220.1	7.23		
Bentazon	248	42.3	241.6	0	103	15	140	213.4	14.9	30	
Chloramben	98.8	24.2	241.6	0	40.9	5	162	90.20	9.05	30	
Acifluorfen	44.1	96.6	241.6	0	18.3	15	140	0		30	
3,5-Dichlorobenzoic acid	229	48.3	241.6	0	94.8	10	164	193.4	16.8	30	
4-Nitrophenol	196	36.2	241.6	0	81.2	44.8	125	172.6	12.8	30	
Dacthal (DCPA)	264	36.2	241.6	0	109	5	132	221.8	17.5	30	
Surr: 2,4-Dichlorophenylacetic acid	1,300		1,208		108	20.1	168		0		



Date: 12/14/2016

Work Order: 1612045
CLIENT: Libby Environmental
Project: Azure-Green-Brookdale

QC SUMMARY REPORT
Organochlorine Pesticides by EPA Method 8081

Sample ID	TOX-CCV-A-15639	SampType:	CCV	Units:	mg/L	Prep Date:	12/14/2016	RunNo:	33385		
Client ID:	CCV	Batch ID:	15639			Analysis Date:	12/14/2016	SeqNo:	633435		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toxaphene	922	0.100	1.000	0	92.2	80	120				

Sample ID	MB-15639	SampType:	MBLK		Units:	mg/Kg		Prep Date:	12/8/2016		RunNo:	33385	
Client ID:	MBLKS	Batch ID:	15639					Analysis Date:	12/14/2016		SeqNo:	633433	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val		%RPD	RPDLimit	Qual
Toxaphene		ND	0.100										
Alpha BHC		ND	0.0100										
Beta BHC		ND	0.0100										
Gamma BHC (Lindane)		ND	0.0100										
Delta BHC		ND	0.0100										
Heptachlor		ND	0.0100										
Aldrin		ND	0.0100										
Heptachlor epoxide		ND	0.0100										
gamma-Chlordane		ND	0.0100										
Endosulfan I		ND	0.0100										
alpha-Chlordane		ND	0.0100										
Dieldrin		ND	0.0100										
4,4'-DDE		ND	0.0200										
Endrin		ND	0.0200										
Endosulfan II		ND	0.0200										
4,4'-DDD		ND	0.0200										
Endrin aldehyde		ND	0.0200										
Endosulfan sulfate		ND	0.0200										
4,4'-DDT		ND	0.0200										
Endrin ketone		ND	0.0200										
Methoxychlor		ND	0.0500										
Surr: Decachlorobiphenyl		0.0619		0.05000		124	17.8	157					
Surr: Tetrachloro-m-xylene		0.0507		0.05000		101	11	150					



Date: 12/14/2016

Work Order: 1612045
CLIENT: Libby Environmental
Project: Azure-Green-Brookdale

QC SUMMARY REPORT

Organochlorine Pesticides by EPA Method 8081

Sample ID	LCS-15639	SampType:	LCS	Units:	mg/Kg	Prep Date:	12/8/2016	RunNo:	33385		
Client ID:	LCSS	Batch ID:	15639	Analysis Date:				12/14/2016	SeqNo:	633432	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alpha BHC	0.245	0.0100	0.2000	0	123	54.2	139				
Beta BHC	0.245	0.0100	0.2000	0	122	56.5	142				
Gamma BHC (Lindane)	0.242	0.0100	0.2000	0	121	55.5	142				
Delta BHC	0.238	0.0100	0.2000	0	119	47.4	157				
Heptachlor	0.284	0.0100	0.2000	0	142	50.9	153				
Aldrin	0.241	0.0100	0.2000	0	120	43.7	147				
Heptachlor epoxide	0.247	0.0100	0.2000	0	123	56.2	137				
gamma-Chlordane	0.244	0.0100	0.2000	0	122	58.5	136				
Endosulfan I	0.241	0.0100	0.2000	0	120	60	132				
alpha-Chlordane	0.246	0.0100	0.2000	0	123	46.1	140				
Dieldrin	0.242	0.0100	0.2000	0	121	61.2	133				
4,4'-DDE	0.254	0.0200	0.2000	0	127	55.4	142				
Endrin	0.257	0.0200	0.2000	0	128	56.5	143				
Endosulfan II	0.240	0.0200	0.2000	0	120	62	143				
4,4'-DDD	0.304	0.0200	0.2000	0	152	53.3	145				S
Endrin aldehyde	0.203	0.0200	0.2000	0	102	39.5	153				
Endosulfan sulfate	0.251	0.0200	0.2000	0	126	53.8	148				
4,4'-DDT	0.399	0.0200	0.2000	0	200	48.2	152				S
Endrin ketone	0.261	0.0200	0.2000	0	131	28.5	162				
Methoxychlor	0.475	0.0500	0.2000	0	237	34.6	159				S
Surr: Decachlorobiphenyl	0.0636		0.05000		127	17.8	157				
Surr: Tetrachloro-m-xylene	0.0513		0.05000		103	11	150				

NOTES:

S - Outlying spike recovery observed (high bias). Samples are non-detect for this analyte; no further action required.

Sample ID	1612045-001ADUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	12/8/2016	RunNo:	33385		
Client ID:	BGC-1M	Batch ID:	15639			Analysis Date:	12/14/2016	SeqNo:	633429		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toxaphene	ND	0.118						0		30	
Alpha BHC	ND	0.0118						0		30	



Date: 12/14/2016

Work Order: 1612045
CLIENT: Libby Environmental
Project: Azure-Green-Brookdale

QC SUMMARY REPORT

Organochlorine Pesticides by EPA Method 8081

Sample ID 1612045-001ADUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 12/8/2016		RunNo: 33385			
Client ID: BGC-1M		Batch ID: 15639				Analysis Date: 12/14/2016		SeqNo: 633429			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beta BHC	ND	0.0118						0		30	
Gamma BHC (Lindane)	ND	0.0118						0		30	
Delta BHC	ND	0.0118						0		30	
Heptachlor	ND	0.0118						0		30	
Aldrin	ND	0.0118						0		30	
Heptachlor epoxide	ND	0.0118						0		30	
gamma-Chlordane	ND	0.0118						0		30	
Endosulfan I	ND	0.0118						0		30	
alpha-Chlordane	ND	0.0118						0		30	
Dieldrin	0.117	0.0118						0.09387	21.8	30	
4,4'-DDE	ND	0.0236						0		30	
Endrin	ND	0.0236						0		30	
Endosulfan II	ND	0.0236						0		30	
4,4'-DDD	ND	0.0236						0		30	
Endrin aldehyde	ND	0.0236						0		30	
Endosulfan sulfate	ND	0.0236						0		30	
4,4'-DDT	ND	0.0236						0		30	
Endrin ketone	ND	0.0236						0		30	
Methoxychlor	ND	0.0590						0		30	
Surr: Decachlorobiphenyl	0.0700		0.05902		119	17.8	157		0		
Surr: Tetrachloro-m-xylene	0.0544		0.05902		92.2	11	150		0		

Sample ID 1612045-001AMS		SampType: MS		Units: mg/Kg-dry		Prep Date: 12/8/2016		RunNo: 33385			
Client ID: BGC-1M		Batch ID: 15639				Analysis Date: 12/14/2016		SeqNo: 633430			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alpha BHC	0.297	0.0118	0.2365	0	125	49.1	158				
Beta BHC	0.955	0.0118	0.2365	0	404	50.9	160				S
Gamma BHC (Lindane)	0.281	0.0118	0.2365	0	119	55.3	157				
Delta BHC	0.947	0.0118	0.2365	0	400	55.8	160				S



Date: 12/14/2016

Work Order: 1612045
CLIENT: Libby Environmental
Project: Azure-Green-Brookdale

QC SUMMARY REPORT
Organochlorine Pesticides by EPA Method 8081

Sample ID	1612045-001AMS	SampType:	MS	Units:	mg/Kg-dry	Prep Date:	12/8/2016	RunNo:	33385		
Client ID:	BGC-1M	Batch ID:	15639	Analysis Date:				12/14/2016	SeqNo:	633430	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Heptachlor	0.343	0.0118	0.2365	0	145	53.6	167				
Aldrin	0.284	0.0118	0.2365	0	120	46.4	145				
Heptachlor epoxide	0.300	0.0118	0.2365	0	127	48.5	151				
gamma-Chlordane	0.297	0.0118	0.2365	0	125	49	162				
Endosulfan I	0.306	0.0118	0.2365	0	129	44.7	162				
alpha-Chlordane	0.297	0.0118	0.2365	0	125	46.3	153				
Dieldrin	0.406	0.0118	0.2365	0.09387	132	48	162				
4,4'-DDE	0.306	0.0237	0.2365	0	129	39.9	162				
Endrin	0.308	0.0237	0.2365	0	130	50.5	166				
Endosulfan II	0.286	0.0237	0.2365	0	121	51	152				
4,4'-DDD	0.367	0.0237	0.2365	0	155	45.8	160				
Endrin aldehyde	0.240	0.0237	0.2365	0	102	38.3	156				
Endosulfan sulfate	0.290	0.0237	0.2365	0	123	53.2	154				
4,4'-DDT	0.505	0.0237	0.2365	0	213	45.7	168				S
Endrin ketone	0.311	0.0237	0.2365	0	131	68.3	144				
Methoxychlor	0.676	0.0591	0.2365	0	286	43.4	178				S
Surr: Decachlorobiphenyl	0.0641		0.05914		108	17.8	157				
Surr: Tetrachloro-m-xylene	0.0490		0.05914		82.9	11	150				

NOTES:

S - Outlying spike recovery(ies) observed.

Sample ID	1612045-001AMSD	SampType:	MSD	Units:	mg/Kg-dry	Prep Date:	12/8/2016	RunNo:	33385		
Client ID:	BGC-1M	Batch ID:	15639			Analysis Date:	12/14/2016	SeqNo:	633467		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alpha BHC	0.297	0.0115	0.2300	0	129	49.1	158	0.2965	0.282	30	
Beta BHC	0.933	0.0115	0.2300	0	406	50.9	160	0.9548	2.35	30	S
Gamma BHC (Lindane)	0.285	0.0115	0.2300	0	124	55.3	157	0.2814	1.23	30	
Delta BHC	0.875	0.0115	0.2300	0	381	55.8	160	0.9466	7.81	30	S
Heptachlor	0.349	0.0115	0.2300	0	152	53.6	167	0.3432	1.70	30	
Aldrin	0.289	0.0115	0.2300	0	126	46.4	145	0.2837	1.94	30	

Work Order: 1612045
CLIENT: Libby Environmental
Project: Azure-Green-Brookdale

QC SUMMARY REPORT

Organochlorine Pesticides by EPA Method 8081

Sample ID	1612045-001AMSD	SampType:	MSD	Units:	mg/Kg-dry	Prep Date:	12/8/2016	RunNo:	33385		
Client ID:	BGC-1M	Batch ID:	15639			Analysis Date:	12/14/2016	SeqNo:	633467		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Heptachlor epoxide	0.303	0.0115	0.2300	0	132	48.5	151	0.2997	1.08	30	
gamma-Chlordane	0.302	0.0115	0.2300	0	131	49	162	0.2968	1.57	30	
Endosulfan I	0.309	0.0115	0.2300	0	134	44.7	162	0.3057	1.01	30	
alpha-Chlordane	0.303	0.0115	0.2300	0	132	46.3	153	0.2968	2.03	30	
Dieldrin	0.406	0.0115	0.2300	0.09387	136	48	162	0.4062	0.0515	30	
4,4´-DDE	0.312	0.0230	0.2300	0	136	39.9	162	0.3059	1.87	30	
Endrin	0.315	0.0230	0.2300	0	137	50.5	166	0.3082	2.11	30	
Endosulfan II	0.291	0.0230	0.2300	0	127	51	152	0.2861	1.70	30	
4,4´-DDD	0.371	0.0230	0.2300	0	161	45.8	160	0.3670	1.13	30	S
Endrin aldehyde	0.238	0.0230	0.2300	0	104	38.3	156	0.2404	0.802	30	
Endosulfan sulfate	0.294	0.0230	0.2300	0	128	53.2	154	0.2901	1.40	30	
4,4´-DDT	0.506	0.0230	0.2300	0	220	45.7	168	0.5046	0.360	30	S
Endrin ketone	0.311	0.0230	0.2300	0	135	68.3	144	0.3107	0.181	30	
Methoxychlor	0.661	0.0575	0.2300	0	287	43.4	178	0.6762	2.27	30	S
Surr: Decachlorobiphenyl	0.0545		0.05749		94.7	17.8	157		0		
Surr: Tetrachloro-m-xylene	0.0470		0.05749		81.8	11	150		0		

NOTES:

S - Outlying spike recovery(ies) observed.



Date: 12/14/2016

Work Order: 1612045
CLIENT: Libby Environmental
Project: Azure-Green-Brookdale

QC SUMMARY REPORT
Sample Moisture (Percent Moisture)

Sample ID	1612048-004ADUP	SampType:	DUP	Units:	wt%	Prep Date:	12/6/2016	RunNo:	33229		
Client ID:	BATCH	Batch ID:	R33229			Analysis Date:	12/6/2016	SeqNo:	630165		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	12.0	0.500						12.08	0.294	20	

Client Name: **LIBBY**
 Logged by: **Erica Silva**

Work Order Number: **1612045**
 Date Received: **12/5/2016 2:00:00 PM**

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
 2. How was the sample delivered? Client

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
 4. Shipping container/cooler in good condition? Yes ☒ No ☐
 5. Custody Seals present on shipping container/cooler?
 (Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Required ☒
 6. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
 7. Were all items received at a temperature of >0°C to 10.0°C* Yes ☒ No ☐ NA ☐
 8. Sample(s) in proper container(s)? Yes ☒ No ☐
 9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
 10. Are samples properly preserved? Yes ☒ No ☐
 11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
 12. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
 13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
 14. Does paperwork match bottle labels? Yes ☒ No ☐
 15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
 16. Is it clear what analyses were requested? Yes ☒ No ☐
 17. Were all holding times able to be met? Yes ☒ No ☐

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: Date
 By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
 Regarding:
 Client Instructions:

19. Additional remarks:

Item Information

Item #	Temp °C
Cooler	8.6
Sample	4.1

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Libby Environmental, Inc.

4139 Libby Road NE
Olympia, WA 98506

Ph: 360-352-2110
Fax: 360-352-4154

Chain of Custody Record

1612045

www.LibbyEnvironmental.com

Client: Libby Environmental

Address: See above

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____

Client Project # L161202-1

Date: 12/5/16

Page: 1 of 1

Project Manager: Sherry Chilcutt

Project Name: Azure-Green-Brookdale

Location: _____ City, State: Tacoma, Wa

Collector: JFH

Date of Collection: 12-1-16

Email: libbyenv@aol.com

Page 22 of 22



Sample Number	Depth	Time	Sample Type	Container Type	VOC 8260	NWTPH-Gx	BTEX 8021	NWTPH-HCID	NWTPH-Dx	c PAH 8270	PAH 8270	Semi Vol 8270	PCB 8082	MTCA 5 Metals	RCRA 8 Metals	Chlorinated Pesticides	Herbicides	Field Notes
1 BGC-1M	6"	2:05	Soil	402												X	X	
2 BGC-2M	6"	2:09	└	└												X	X	
3 BGC-3G	6"	2:20	└	└												X	X	
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		

Relinquished by: [Signature] Date / Time: 12-5-16 1400 Received by: [Signature] Date / Time: 12/5/16 1400

Relinquished by: _____ Date / Time: _____ Received by: _____ Date / Time: _____

Relinquished by: _____ Date / Time: _____ Received by: _____ Date / Time: _____

Sample Receipt

Good Condition? Y N
Temp. °C
Seals Intact? Y N N/A
Total Number of Containers

Remarks:

TAT: 24HR 48HR 5-DAY

Attachment B
2017 and 2018 EPI Laboratory Analytical Results



March 1, 2017

Mr. Thom Morin
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

Dear Mr. Morin,

On January 27th, 83 samples were received by our laboratory and assigned our laboratory project number EV17010155. The project was identified as your 74001. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

**CERTIFICATE OF ANALYSIS**

CLIENT: Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

DATE: 3/1/2017

ALS JOB#: EV17010155

ALS SAMPLE#: EV17010155-01

CLIENT CONTACT: Thom Morin

DATE RECEIVED: 01/27/2017

CLIENT PROJECT: 74001

COLLECTION DATE: 1/25/2017 8:30:00 AM

CLIENT SAMPLE ID 13:Tee:0.5

WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/08/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/08/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	103	02/08/2017	GAP
DCB	EPA-8081	118	02/08/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-02
CLIENT SAMPLE ID	13:Tee:1.0	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/25/2017 8:35:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Aldrin	EPA-8081	0.13	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/08/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Dieldrin	EPA-8081	1.5	0.20	20	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/08/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	89.2	02/08/2017	GAP
TCMX 20X Dilution	EPA-8081	95.2	02/09/2017	GAP
DCB	EPA-8081	83.5	02/08/2017	GAP
DCB 20X Dilution	EPA-8081	122	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-03
CLIENT SAMPLE ID	13:Tee:1.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/25/2017 8:40:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/21/2017	PAB
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Dieldrin	EPA-8081	0.27	0.10	10	MG/KG	02/24/2017	PAB
Endrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/21/2017	PAB
Hexachlorobenzene	EPA-8081	U	0	1	MG/KG	02/21/2017	PAB

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	72.7	02/21/2017	PAB
TCMX 10X Dilution	EPA-8081	119	02/24/2017	PAB
DCB	EPA-8081	68.1	02/21/2017	PAB
DCB 10X Dilution	EPA-8081	95.4	02/24/2017	PAB

U - Analyte analyzed for but not detected at level above reporting limit.

**CERTIFICATE OF ANALYSIS**

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-04
CLIENT SAMPLE ID	13:Fairway:0.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/25/2017 9:10:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/08/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/08/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	101	02/08/2017	GAP
DCB	EPA-8081	94.7	02/08/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-05
CLIENT SAMPLE ID	13:Fairway:1.0	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/25/2017 9:15:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/08/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/08/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	103	02/08/2017	GAP
DCB	EPA-8081	96.8	02/08/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
		ALS JOB#:	EV17010155
		ALS SAMPLE#:	EV17010155-07
CLIENT CONTACT:	Thom Morin	DATE RECEIVED:	01/27/2017
CLIENT PROJECT:	74001	COLLECTION DATE:	1/25/2017 9:45:00 AM
CLIENT SAMPLE ID	6:Tee:0.5	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/08/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/08/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	87.1	02/08/2017	GAP
DCB	EPA-8081	83.0	02/08/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-08
CLIENT SAMPLE ID	6:Tee:1.0	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/25/2017 9:50:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/08/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/08/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	94.2	02/08/2017	GAP
DCB	EPA-8081	89.1	02/08/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-10
CLIENT SAMPLE ID	14:Tee:0.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/25/2017 10:10:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
D-BHC	EPA-8081	0.18	0.010	1	MG/KG	02/08/2017	GAP
Aldrin	EPA-8081	0.11	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/08/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Dieldrin	EPA-8081	0.70	0.10	10	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/08/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	105	02/08/2017	GAP
TCMX 10X Dilution	EPA-8081	98.8	02/09/2017	GAP
DCB	EPA-8081	103	02/08/2017	GAP
DCB 10X Dilution	EPA-8081	114	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
		ALS JOB#:	EV17010155
		ALS SAMPLE#:	EV17010155-11
CLIENT CONTACT:	Thom Morin	DATE RECEIVED:	01/27/2017
CLIENT PROJECT:	74001	COLLECTION DATE:	1/25/2017 10:15:00 AM
CLIENT SAMPLE ID	14:Tee:1.0	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/08/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/08/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	88.3	02/08/2017	GAP
DCB	EPA-8081	81.0	02/08/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027
DATE: 3/1/2017
ALS JOB#: EV17010155
ALS SAMPLE#: EV17010155-13
CLIENT CONTACT: Thom Morin
DATE RECEIVED: 01/27/2017
CLIENT PROJECT: 74001
COLLECTION DATE: 1/25/2017 10:35:00 AM
CLIENT SAMPLE ID 5:Green:0.5
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
D-BHC	EPA-8081	0.22	0.010	1	MG/KG	02/08/2017	GAP
Aldrin	EPA-8081	0.16	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/08/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDE	EPA-8081	0.029	0.010	1	MG/KG	02/08/2017	GAP
Dieldrin	EPA-8081	2.9	0.20	20	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	0.028	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDT	EPA-8081	0.016	0.010	1	MG/KG	02/08/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/08/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	77.7	02/08/2017	GAP
TCMX 20X Dilution	EPA-8081	101	02/09/2017	GAP
DCB	EPA-8081	72.7	02/08/2017	GAP
DCB 20X Dilution	EPA-8081	66.0	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-14
CLIENT SAMPLE ID	5:Green:1.0	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/25/2017 10:40:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
B-BHC	EPA-8081	0.022	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
D-BHC	EPA-8081	0.16	0.010	1	MG/KG	02/08/2017	GAP
Aldrin	EPA-8081	0.29	0.10	10	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/08/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDE	EPA-8081	0.014	0.010	1	MG/KG	02/08/2017	GAP
Dieldrin	EPA-8081	1.6	0.10	10	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	0.014	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/08/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	76.0	02/08/2017	GAP
TCMX 10X Dilution	EPA-8081	76.0	02/09/2017	GAP
DCB	EPA-8081	71.8	02/08/2017	GAP
DCB 10X Dilution	EPA-8081	68.8	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-15
CLIENT SAMPLE ID	5:Green:1.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/25/2017 10:45:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
D-BHC	EPA-8081	0.052	0.010	1	MG/KG	02/21/2017	PAB
Aldrin	EPA-8081	0.014	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/21/2017	PAB
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Dieldrin	EPA-8081	0.56	0.10	10	MG/KG	02/24/2017	PAB
Endrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/21/2017	PAB
Hexachlorobenzene	EPA-8081	U	0	1	MG/KG	02/21/2017	PAB

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	83.5	02/21/2017	PAB
TCMX 10X Dilution	EPA-8081	94.9	02/24/2017	PAB
DCB	EPA-8081	76.9	02/21/2017	PAB
DCB 10X Dilution	EPA-8081	86.5	02/24/2017	PAB

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-16
CLIENT SAMPLE ID	5:Fairway:0.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/25/2017 10:55:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/08/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/08/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	51.8	02/08/2017	GAP
DCB	EPA-8081	51.9	02/08/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-17
CLIENT SAMPLE ID	5:Fairway:1.0	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/25/2017 11:00:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/08/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/08/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	79.4	02/08/2017	GAP
DCB	EPA-8081	76.7	02/08/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-19
CLIENT SAMPLE ID	11:Fairway:0.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/25/2017 12:15:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/08/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/08/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	68.8	02/08/2017	GAP
DCB	EPA-8081	63.7	02/08/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-20
CLIENT SAMPLE ID	11:Fairway:1.0	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/25/2017 12:20:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/08/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/08/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	71.8	02/08/2017	GAP
DCB	EPA-8081	70.8	02/08/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-22
CLIENT SAMPLE ID	12:Tee:0.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/25/2017 12:45:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/08/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Dieldrin	EPA-8081	2.4	0.20	20	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	0.011	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/08/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	86.1	02/08/2017	GAP
TCMX 20X Dilution	EPA-8081	90.6	02/09/2017	GAP
DCB	EPA-8081	83.0	02/08/2017	GAP
DCB 20X Dilution	EPA-8081	96.6	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-23
CLIENT SAMPLE ID	12:Tee:1.0	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/25/2017 12:50:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/08/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Dieldrin	EPA-8081	0.12	0.010	1	MG/KG	02/08/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/08/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	69.6	02/08/2017	GAP
DCB	EPA-8081	66.6	02/08/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-24
CLIENT SAMPLE ID	12:Tee:1.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/25/2017 12:55:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/21/2017	PAB
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Dieldrin	EPA-8081	0.12	0.010	1	MG/KG	02/21/2017	PAB
Endrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/21/2017	PAB
Hexachlorobenzene	EPA-8081	U	0	1	MG/KG	02/21/2017	PAB

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	103	02/21/2017	PAB
DCB	EPA-8081	92.2	02/21/2017	PAB

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027
DATE: 3/1/2017
ALS JOB#: EV17010155
ALS SAMPLE#: EV17010155-25
CLIENT CONTACT: Thom Morin
DATE RECEIVED: 01/27/2017
CLIENT PROJECT: 74001
COLLECTION DATE: 1/25/2017 1:05:00 PM
CLIENT SAMPLE ID 6:Green:0.5
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
D-BHC	EPA-8081	0.13	0.010	1	MG/KG	02/08/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/08/2017	GAP
Endosulfan I	EPA-8081	0.084	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Dieldrin	EPA-8081	1.2	0.20	20	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/08/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	69.8	02/08/2017	GAP
TCMX 20X Dilution	EPA-8081	124	02/09/2017	GAP
DCB	EPA-8081	67.4	02/08/2017	GAP
DCB 20X Dilution	EPA-8081	72.4	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Environmental Partners, Inc. DATE: 3/1/2017
1180 NW Maple St, Suite 310 ALS JOB#: EV17010155
Issaquah, WA 98027 ALS SAMPLE#: EV17010155-26
CLIENT CONTACT: Thom Morin DATE RECEIVED: 01/27/2017
CLIENT PROJECT: 74001 COLLECTION DATE: 1/25/2017 1:10:00 PM
CLIENT SAMPLE ID 6:Green:1.0 WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
D-BHC	EPA-8081	0.088	0.010	1	MG/KG	02/08/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/08/2017	GAP
Endosulfan I	EPA-8081	0.028	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Dieldrin	EPA-8081	0.49	0.10	10	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/08/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	74.7	02/08/2017	GAP
TCMX 10X Dilution	EPA-8081	80.2	02/09/2017	GAP
DCB	EPA-8081	70.0	02/08/2017	GAP
DCB 10X Dilution	EPA-8081	77.1	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-27
CLIENT SAMPLE ID	6:Green:1.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/25/2017 1:15:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/21/2017	PAB
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Dieldrin	EPA-8081	0.17	0.010	1	MG/KG	02/21/2017	PAB
Endrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/21/2017	PAB
Hexachlorobenzene	EPA-8081	U	0	1	MG/KG	02/21/2017	PAB

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	93.6	02/21/2017	PAB
DCB	EPA-8081	85.2	02/21/2017	PAB

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-28
CLIENT SAMPLE ID	1:Tee:0.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/25/2017 1:35:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/08/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/08/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	75.9	02/08/2017	GAP
DCB	EPA-8081	72.9	02/08/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-29
CLIENT SAMPLE ID	1:Tee:1.0	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/25/2017 1:40:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
D-BHC	EPA-8081	0.028	0.010	1	MG/KG	02/08/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/08/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Dieldrin	EPA-8081	0.044	0.010	1	MG/KG	02/08/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/08/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/08/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	88.3	02/08/2017	GAP
DCB	EPA-8081	84.8	02/08/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027
DATE: 3/1/2017
ALS JOB#: EV17010155
ALS SAMPLE#: EV17010155-30
CLIENT CONTACT: Thom Morin
DATE RECEIVED: 01/27/2017
CLIENT PROJECT: 74001
COLLECTION DATE: 1/25/2017 1:45:00 PM
CLIENT SAMPLE ID 1:Tee:1.5
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Aldrin	EPA-8081	0.028	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/21/2017	PAB
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDE	EPA-8081	0.014	0.010	1	MG/KG	02/21/2017	PAB
Dieldrin	EPA-8081	6.8	0.50	50	MG/KG	02/24/2017	PAB
Endrin	EPA-8081	0.022	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDT	EPA-8081	0.016	0.010	1	MG/KG	02/21/2017	PAB
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/21/2017	PAB
Hexachlorobenzene	EPA-8081	U	0	1	MG/KG	02/21/2017	PAB

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	82.6	02/21/2017	PAB
TCMX 50X Dilution	EPA-8081	106	02/24/2017	PAB
DCB	EPA-8081	75.2	02/21/2017	PAB
DCB 50X Dilution	EPA-8081	88.5	02/24/2017	PAB

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027
DATE: 3/1/2017
ALS JOB#: EV17010155
ALS SAMPLE#: EV17010155-31
CLIENT CONTACT: Thom Morin
DATE RECEIVED: 01/27/2017
CLIENT PROJECT: 74001
COLLECTION DATE: 1/25/2017 2:00:00 PM
CLIENT SAMPLE ID 1:Green:0.5
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	0.085	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	0.63	0.10	10	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	79.7	02/09/2017	GAP
TCMX 10X Dilution	EPA-8081	84.1	02/09/2017	GAP
DCB	EPA-8081	75.0	02/09/2017	GAP
DCB 10X Dilution	EPA-8081	85.9	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027
DATE: 3/1/2017
ALS JOB#: EV17010155
ALS SAMPLE#: EV17010155-32
CLIENT CONTACT: Thom Morin
DATE RECEIVED: 01/27/2017
CLIENT PROJECT: 74001
COLLECTION DATE: 1/25/2017 2:05:00 PM
CLIENT SAMPLE ID 1:Green:1.0
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	0.050	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	0.023	0.010	1	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	82.8	02/09/2017	GAP
DCB	EPA-8081	76.6	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-34
CLIENT SAMPLE ID	14:Green:0.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/26/2017 7:55:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	0.12	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	1.6	0.20	20	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	0.015	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	84.2	02/09/2017	GAP
TCMX 20X Dilution	EPA-8081	90.3	02/09/2017	GAP
DCB	EPA-8081	79.0	02/09/2017	GAP
DCB 20X Dilution	EPA-8081	105	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-35
CLIENT SAMPLE ID	14:Green:1.0	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/26/2017 8:00:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	0.071	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	0.015	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	0.50	0.10	10	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	82.3	02/09/2017	GAP
TCMX 10X Dilution	EPA-8081	85.8	02/09/2017	GAP
DCB	EPA-8081	75.4	02/09/2017	GAP
DCB 10X Dilution	EPA-8081	80.8	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-36
CLIENT SAMPLE ID	14:Green:1.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/26/2017 8:05:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/21/2017	PAB
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Dieldrin	EPA-8081	0.41	0.10	10	MG/KG	02/24/2017	PAB
Endrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/21/2017	PAB
Hexachlorobenzene	EPA-8081	U	0	1	MG/KG	02/21/2017	PAB

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	78.2	02/21/2017	PAB
TCMX 10X Dilution	EPA-8081	90.1	02/24/2017	PAB
DCB	EPA-8081	69.3	02/21/2017	PAB
DCB 10X Dilution	EPA-8081	84.0	02/24/2017	PAB

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-37
CLIENT SAMPLE ID	15:Fairway:0.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/26/2017 8:10:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	91.1	02/09/2017	GAP
DCB	EPA-8081	85.5	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-38
CLIENT SAMPLE ID	15:Fairway:1.0	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/26/2017 8:15:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	85.6	02/09/2017	GAP
DCB	EPA-8081	78.4	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Environmental Partners, Inc. DATE: 3/1/2017
1180 NW Maple St, Suite 310 ALS JOB#: EV17010155
Issaquah, WA 98027 ALS SAMPLE#: EV17010155-40
CLIENT CONTACT: Thom Morin DATE RECEIVED: 01/27/2017
CLIENT PROJECT: 74001 COLLECTION DATE: 1/26/2017 9:05:00 AM
CLIENT SAMPLE ID 16:Green:0.5 WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	0.065	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	0.018	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	3.5	0.20	20	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	0.024	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	0.018	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	79.1	02/09/2017	GAP
TCMX 20X Dilution	EPA-8081	85.0	02/09/2017	GAP
DCB	EPA-8081	76.3	02/09/2017	GAP
DCB 20X Dilution	EPA-8081	103	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027
DATE: 3/1/2017
ALS JOB#: EV17010155
ALS SAMPLE#: EV17010155-41
CLIENT CONTACT: Thom Morin
DATE RECEIVED: 01/27/2017
CLIENT PROJECT: 74001
COLLECTION DATE: 1/26/2017 9:10:00 AM
CLIENT SAMPLE ID 16:Green:1.0
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	0.063	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	0.48	0.10	10	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	86.4	02/09/2017	GAP
TCMX 10X Dilution	EPA-8081	92.4	02/09/2017	GAP
DCB	EPA-8081	81.7	02/09/2017	GAP
DCB 10X Dilution	EPA-8081	93.4	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-42
CLIENT SAMPLE ID	16:Green:1.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/26/2017 9:15:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/21/2017	PAB
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Dieldrin	EPA-8081	0.038	0.010	1	MG/KG	02/21/2017	PAB
Endrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/21/2017	PAB
Hexachlorobenzene	EPA-8081	U	0	1	MG/KG	02/21/2017	PAB

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	65.2	02/21/2017	PAB
DCB	EPA-8081	56.9	02/21/2017	PAB

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027
DATE: 3/1/2017
ALS JOB#: EV17010155
ALS SAMPLE#: EV17010155-43
CLIENT CONTACT: Thom Morin
DATE RECEIVED: 01/27/2017
CLIENT PROJECT: 74001
COLLECTION DATE: 1/26/2017 9:30:00 AM
CLIENT SAMPLE ID 17:Tee:0.5
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	0.63	0.10	10	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	83.0	02/09/2017	GAP
TCMX 10X Dilution	EPA-8081	88.1	02/09/2017	GAP
DCB	EPA-8081	76.8	02/09/2017	GAP
DCB 10X Dilution	EPA-8081	84.0	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-44
CLIENT SAMPLE ID	17:Tee:1.0	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/26/2017 9:35:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	0.13	0.010	1	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	78.6	02/09/2017	GAP
DCB	EPA-8081	71.5	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-45
CLIENT SAMPLE ID	17:Tee:1.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/26/2017 9:40:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/21/2017	PAB
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Dieldrin	EPA-8081	0.065	0.010	1	MG/KG	02/21/2017	PAB
Endrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/21/2017	PAB
Hexachlorobenzene	EPA-8081	U	0	1	MG/KG	02/21/2017	PAB

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	84.1	02/21/2017	PAB
DCB	EPA-8081	76.9	02/21/2017	PAB

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
		ALS JOB#:	EV17010155
		ALS SAMPLE#:	EV17010155-46
CLIENT CONTACT:	Thom Morin	DATE RECEIVED:	01/27/2017
CLIENT PROJECT:	74001	COLLECTION DATE:	1/26/2017 9:55:00 AM
CLIENT SAMPLE ID	18:Fairway:0.5	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	80.2	02/09/2017	GAP
DCB	EPA-8081	76.0	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

**CERTIFICATE OF ANALYSIS**

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-47
CLIENT SAMPLE ID	18:Fairway:1.0	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/26/2017 10:00:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	80.8	02/09/2017	GAP
DCB	EPA-8081	79.7	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-49
CLIENT SAMPLE ID	18:Green:0.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/26/2017 10:15:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	0.069	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	0.060	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	6.4	0.50	50	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	0.061	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	0.026	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	74.7	02/09/2017	GAP
TCMX 50X Dilution	EPA-8081	162 DS2	02/09/2017	GAP
DCB	EPA-8081	66.3	02/09/2017	GAP
DCB 50X Dilution	EPA-8081	232 DS2	02/09/2017	GAP

DS2 - Due to high dilution factor surrogate results should be considered uncontrolled.

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-50
CLIENT SAMPLE ID	18:Green:1.0	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/26/2017 10:20:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	0.052	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	0.40	0.10	10	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	0.017	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	86.5	02/09/2017	GAP
TCMX 10X Dilution	EPA-8081	87.6	02/09/2017	GAP
DCB	EPA-8081	88.8	02/09/2017	GAP
DCB 10X Dilution	EPA-8081	82.8	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-51
CLIENT SAMPLE ID	18:Green:1.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/26/2017 10:25:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/21/2017	PAB
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Dieldrin	EPA-8081	0.11	0.010	1	MG/KG	02/21/2017	PAB
Endrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/21/2017	PAB
Hexachlorobenzene	EPA-8081	U	0	1	MG/KG	02/21/2017	PAB

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	107	02/21/2017	PAB
DCB	EPA-8081	100	02/21/2017	PAB

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-52
CLIENT SAMPLE ID	4:Fairway:0.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/26/2017 11:45:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	87.0	02/09/2017	GAP
DCB	EPA-8081	88.7	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-53
CLIENT SAMPLE ID	4:Fairway:1.0	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/26/2017 11:50:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	81.2	02/09/2017	GAP
DCB	EPA-8081	82.0	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-55
CLIENT SAMPLE ID	4:Tee:0.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/26/2017 12:20:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	0.032	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	81.6	02/09/2017	GAP
DCB	EPA-8081	79.2	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
		ALS JOB#:	EV17010155
		ALS SAMPLE#:	EV17010155-56
CLIENT CONTACT:	Thom Morin	DATE RECEIVED:	01/27/2017
CLIENT PROJECT:	74001	COLLECTION DATE:	1/26/2017 12:25:00 PM
CLIENT SAMPLE ID	4:Tee:1.0	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	0.012	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	82.7	02/09/2017	GAP
DCB	EPA-8081	81.0	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
		ALS JOB#:	EV17010155
		ALS SAMPLE#:	EV17010155-58
CLIENT CONTACT:	Thom Morin	DATE RECEIVED:	01/27/2017
CLIENT PROJECT:	74001	COLLECTION DATE:	1/26/2017 12:55:00 PM
CLIENT SAMPLE ID	7:Fairway:0.5	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	69.6	02/09/2017	GAP
DCB	EPA-8081	71.3	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
		ALS JOB#:	EV17010155
		ALS SAMPLE#:	EV17010155-59
CLIENT CONTACT:	Thom Morin	DATE RECEIVED:	01/27/2017
CLIENT PROJECT:	74001	COLLECTION DATE:	1/26/2017 1:00:00 PM
CLIENT SAMPLE ID	7:Fairway1.0	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	90.2	02/09/2017	GAP
DCB	EPA-8081	84.2	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Environmental Partners, Inc. DATE: 3/1/2017
1180 NW Maple St, Suite 310 ALS JOB#: EV17010155
Issaquah, WA 98027 ALS SAMPLE#: EV17010155-61
CLIENT CONTACT: Thom Morin DATE RECEIVED: 01/27/2017
CLIENT PROJECT: 74001 COLLECTION DATE: 1/26/2017 1:30:00 PM
CLIENT SAMPLE ID 7:Green:0.5 WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	0.090	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	3.4	0.20	20	MG/KG	02/10/2017	GAP
Endrin	EPA-8081	0.053	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	0.70	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX 20X Dilution	EPA-8081	93.2	02/10/2017	GAP
TCMX	EPA-8081	89.2	02/09/2017	GAP
DCB 20X Dilution	EPA-8081	111	02/10/2017	GAP
DCB	EPA-8081	87.1	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-62
CLIENT SAMPLE ID	7:Green:1.0	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/26/2017 1:35:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	0.054	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	0.22	0.010	1	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	90.1	02/09/2017	GAP
DCB	EPA-8081	85.9	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
		ALS JOB#:	EV17010155
		ALS SAMPLE#:	EV17010155-63
CLIENT CONTACT:	Thom Morin	DATE RECEIVED:	01/27/2017
CLIENT PROJECT:	74001	COLLECTION DATE:	1/26/2017 1:40:00 PM
CLIENT SAMPLE ID	7:Green:1.5	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/21/2017	PAB
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Dieldrin	EPA-8081	0.23	0.010	1	MG/KG	02/21/2017	PAB
Endrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/21/2017	PAB
Hexachlorobenzene	EPA-8081	U	0	1	MG/KG	02/21/2017	PAB

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	78.8	02/21/2017	PAB
DCB	EPA-8081	73.1	02/21/2017	PAB

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
		ALS JOB#:	EV17010155
		ALS SAMPLE#:	EV17010155-64
CLIENT CONTACT:	Thom Morin	DATE RECEIVED:	01/27/2017
CLIENT PROJECT:	74001	COLLECTION DATE:	1/27/2017 8:00:00 AM
CLIENT SAMPLE ID	3:Tee:0.5	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	0.033	0.010	1	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	85.3	02/09/2017	GAP
DCB	EPA-8081	84.0	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-65
CLIENT SAMPLE ID	3:Tee:1.0	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/27/2017 8:05:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	0.022	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	0.14	0.010	1	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	90.2	02/09/2017	GAP
DCB	EPA-8081	85.7	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-66
CLIENT SAMPLE ID	3:Tee:1.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/27/2017 8:10:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/21/2017	PAB
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Dieldrin	EPA-8081	0.056	0.010	1	MG/KG	02/21/2017	PAB
Endrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/21/2017	PAB
Hexachlorobenzene	EPA-8081	U	0	1	MG/KG	02/21/2017	PAB

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	114	02/21/2017	PAB
DCB	EPA-8081	107	02/21/2017	PAB

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-67
CLIENT SAMPLE ID	2:Fairway:0.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/27/2017 8:25:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	80.8	02/09/2017	GAP
DCB	EPA-8081	76.6	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-68
CLIENT SAMPLE ID	2:Fairway:1.0	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/27/2017 8:30:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	96.5	02/09/2017	GAP
DCB	EPA-8081	94.0	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
		ALS JOB#:	EV17010155
		ALS SAMPLE#:	EV17010155-70
CLIENT CONTACT:	Thom Morin	DATE RECEIVED:	01/27/2017
CLIENT PROJECT:	74001	COLLECTION DATE:	1/27/2017 8:50:00 AM
CLIENT SAMPLE ID	10:Tee:0.5	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	99.2	02/09/2017	GAP
DCB	EPA-8081	93.9	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-71
CLIENT SAMPLE ID	10:Tee:1.0	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/27/2017 8:55:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	0.011	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	98.4	02/09/2017	GAP
DCB	EPA-8081	92.5	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-73
CLIENT SAMPLE ID	9:Green:0.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/27/2017 9:10:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	1.2	0.10	10	MG/KG	02/10/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX 10X Dilution	EPA-8081	89.4	02/10/2017	GAP
TCMX	EPA-8081	88.6	02/09/2017	GAP
DCB 10X Dilution	EPA-8081	88.8	02/10/2017	GAP
DCB	EPA-8081	86.8	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-74
CLIENT SAMPLE ID	9:Green:1.0	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/27/2017 9:15:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	0.33	0.10	10	MG/KG	02/10/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX 10X Dilution	EPA-8081	119	02/10/2017	GAP
TCMX	EPA-8081	111	02/09/2017	GAP
DCB 10X Dilution	EPA-8081	114	02/10/2017	GAP
DCB	EPA-8081	109	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-75
CLIENT SAMPLE ID	9:Green:1.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/27/2017 9:20:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/21/2017	PAB
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Dieldrin	EPA-8081	0.37	0.10	10	MG/KG	02/24/2017	PAB
Endrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/21/2017	PAB
Hexachlorobenzene	EPA-8081	U	0	1	MG/KG	02/21/2017	PAB

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	101	02/21/2017	PAB
TCMX 10X Dilution	EPA-8081	112	02/24/2017	PAB
DCB	EPA-8081	93.3	02/21/2017	PAB
DCB 10X Dilution	EPA-8081	102	02/24/2017	PAB

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-76
CLIENT SAMPLE ID	10:Green:0.5	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/27/2017 9:25:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	0.73	0.10	10	MG/KG	02/10/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX 10X Dilution	EPA-8081	113	02/10/2017	GAP
TCMX	EPA-8081	112	02/09/2017	GAP
DCB 10X Dilution	EPA-8081	112	02/10/2017	GAP
DCB	EPA-8081	116	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-77
CLIENT SAMPLE ID	10:Green:1.0	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/27/2017 9:30:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	0.22	0.010	1	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	101	02/09/2017	GAP
DCB	EPA-8081	99.3	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
		ALS JOB#:	EV17010155
		ALS SAMPLE#:	EV17010155-78
CLIENT CONTACT:	Thom Morin	DATE RECEIVED:	01/27/2017
CLIENT PROJECT:	74001	COLLECTION DATE:	1/27/2017 9:35:00 AM
CLIENT SAMPLE ID	10:Green:1.5	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/21/2017	PAB
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Dieldrin	EPA-8081	0.14	0.010	1	MG/KG	02/21/2017	PAB
Endrin	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/21/2017	PAB
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/21/2017	PAB
Hexachlorobenzene	EPA-8081	U	0	1	MG/KG	02/21/2017	PAB

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	103	02/21/2017	PAB
DCB	EPA-8081	93.7	02/21/2017	PAB

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
		ALS JOB#:	EV17010155
		ALS SAMPLE#:	EV17010155-79
CLIENT CONTACT:	Thom Morin	DATE RECEIVED:	01/27/2017
CLIENT PROJECT:	74001	COLLECTION DATE:	1/27/2017 10:00:00 AM
CLIENT SAMPLE ID	16:Fairway:0.5	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	105	02/09/2017	GAP
DCB	EPA-8081	102	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-80
CLIENT SAMPLE ID	16:Fairway:1.0	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/27/2017 10:05:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
G-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
B-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
D-BHC	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Aldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Chlordane	EPA-8081	U	0.020	1	MG/KG	02/09/2017	GAP
Endosulfan I	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDE	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Dieldrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDD	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan II	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
4,4-DDT	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Methoxychlor	EPA-8081	U	0.010	1	MG/KG	02/09/2017	GAP
Toxaphene	EPA-8081	U	0.50	1	MG/KG	02/09/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	107	02/09/2017	GAP
DCB	EPA-8081	104	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-82
CLIENT SAMPLE ID	Well	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/27/2017 10:40:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
G-BHC	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
B-BHC	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
Heptachlor	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
D-BHC	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
Aldrin	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
Chlordane	EPA-8081	U	0.10	1	UG/L	02/10/2017	GAP
Endosulfan I	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
4,4-DDE	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
Dieldrin	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
Endrin	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
4,4-DDD	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
Endosulfan II	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
4,4-DDT	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
Methoxychlor	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
Toxaphene	EPA-8081	U	2.0	1	UG/L	02/10/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	98.9	02/10/2017	GAP
DCB	EPA-8081	70.3	02/10/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
CLIENT CONTACT:	Thom Morin	ALS JOB#:	EV17010155
CLIENT PROJECT:	74001	ALS SAMPLE#:	EV17010155-83
CLIENT SAMPLE ID	Pond	DATE RECEIVED:	01/27/2017
		COLLECTION DATE:	1/27/2017 10:50:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
G-BHC	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
B-BHC	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
Heptachlor	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
D-BHC	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
Aldrin	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
Heptachlor Epoxide	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
Chlordane	EPA-8081	U	0.10	1	UG/L	02/10/2017	GAP
Endosulfan I	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
4,4-DDE	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
Dieldrin	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
Endrin	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
4,4-DDD	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
Endosulfan II	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
4,4-DDT	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
Endrin Aldehyde	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
Endosulfan Sulfate	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
Methoxychlor	EPA-8081	U	0.050	1	UG/L	02/10/2017	GAP
Toxaphene	EPA-8081	U	2.0	1	UG/L	02/10/2017	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TCMX	EPA-8081	73.6	02/10/2017	GAP
DCB	EPA-8081	62.5	02/10/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

DATE: 3/1/2017
ALS SDG#: EV17010155
WDOE ACCREDITATION: C601

CLIENT CONTACT: Thom Morin
CLIENT PROJECT: 74001

LABORATORY BLANK RESULTS

MBLK-290212 - Batch R290212 - Soil by EPA-8081

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	MG/KG	0.010	02/21/2017	PAB
G-BHC	EPA-8081	U	MG/KG	0.010	02/21/2017	PAB
B-BHC	EPA-8081	U	MG/KG	0.010	02/21/2017	PAB
Heptachlor	EPA-8081	U	MG/KG	0.010	02/21/2017	PAB
D-BHC	EPA-8081	U	MG/KG	0.010	02/21/2017	PAB
Aldrin	EPA-8081	U	MG/KG	0.010	02/21/2017	PAB
Heptachlor Epoxide	EPA-8081	U	MG/KG	0.010	02/21/2017	PAB
Chlordane	EPA-8081	U	MG/KG	0.020	02/21/2017	PAB
Endosulfan I	EPA-8081	U	MG/KG	0.010	02/21/2017	PAB
4,4-DDE	EPA-8081	U	MG/KG	0.010	02/21/2017	PAB
Dieldrin	EPA-8081	U	MG/KG	0.010	02/21/2017	PAB
Endrin	EPA-8081	U	MG/KG	0.010	02/21/2017	PAB
4,4-DDD	EPA-8081	U	MG/KG	0.010	02/21/2017	PAB
Endosulfan II	EPA-8081	U	MG/KG	0.010	02/21/2017	PAB
4,4-DDT	EPA-8081	U	MG/KG	0.010	02/21/2017	PAB
Endrin Aldehyde	EPA-8081	U	MG/KG	0.010	02/21/2017	PAB
Endosulfan Sulfate	EPA-8081	U	MG/KG	0.010	02/21/2017	PAB
Methoxychlor	EPA-8081	U	MG/KG	0.010	02/21/2017	PAB
Toxaphene	EPA-8081	U	MG/KG	0.50	02/21/2017	PAB
Hexachlorobenzene	EPA-8081	U	MG/KG	0.0	02/21/2017	PAB

U - Analyte analyzed for but not detected at level above reporting limit.

MBLK-290220 - Batch R290220 - Soil by EPA-8081

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	MG/KG	0.010	02/14/2017	PAB
G-BHC	EPA-8081	U	MG/KG	0.010	02/14/2017	PAB
B-BHC	EPA-8081	U	MG/KG	0.010	02/14/2017	PAB
Heptachlor	EPA-8081	U	MG/KG	0.010	02/14/2017	PAB
D-BHC	EPA-8081	U	MG/KG	0.010	02/14/2017	PAB
Aldrin	EPA-8081	U	MG/KG	0.010	02/14/2017	PAB
Heptachlor Epoxide	EPA-8081	U	MG/KG	0.010	02/14/2017	PAB
Chlordane	EPA-8081	U	MG/KG	0.020	02/14/2017	PAB
Endosulfan I	EPA-8081	U	MG/KG	0.010	02/14/2017	PAB
4,4-DDE	EPA-8081	U	MG/KG	0.010	02/14/2017	PAB
Dieldrin	EPA-8081	U	MG/KG	0.010	02/14/2017	PAB
Endrin	EPA-8081	U	MG/KG	0.010	02/14/2017	PAB
4,4-DDD	EPA-8081	U	MG/KG	0.010	02/14/2017	PAB
Endosulfan II	EPA-8081	U	MG/KG	0.010	02/14/2017	PAB

CERTIFICATE OF ANALYSIS

CLIENT:	Environmental Partners, Inc. 1180 NW Maple St, Suite 310 Issaquah, WA 98027	DATE:	3/1/2017
		ALS SDG#:	EV17010155
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Thom Morin		
CLIENT PROJECT:	74001		

LABORATORY BLANK RESULTS

MBLK-290220 - Batch R290220 - Soil by EPA-8081

4,4-DDT	EPA-8081	U	MG/KG	0.010	02/14/2017	PAB
Endrin Aldehyde	EPA-8081	U	MG/KG	0.010	02/14/2017	PAB
Endosulfan Sulfate	EPA-8081	U	MG/KG	0.010	02/14/2017	PAB
Methoxychlor	EPA-8081	U	MG/KG	0.010	02/14/2017	PAB
Toxaphene	EPA-8081	U	MG/KG	0.50	02/14/2017	PAB
Hexachlorobenzene	EPA-8081	U	MG/KG	0.0	02/14/2017	PAB

U - Analyte analyzed for but not detected at level above reporting limit.

MBLK-R289272 - Batch R289272 - Soil by EPA-8081

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	MG/KG	0.010	02/08/2017	GAP
G-BHC	EPA-8081	U	MG/KG	0.010	02/08/2017	GAP
B-BHC	EPA-8081	U	MG/KG	0.010	02/08/2017	GAP
Heptachlor	EPA-8081	U	MG/KG	0.010	02/08/2017	GAP
D-BHC	EPA-8081	U	MG/KG	0.010	02/08/2017	GAP
Aldrin	EPA-8081	U	MG/KG	0.010	02/08/2017	GAP
Heptachlor Epoxide	EPA-8081	U	MG/KG	0.010	02/08/2017	GAP
Chlordane	EPA-8081	U	MG/KG	0.020	02/08/2017	GAP
Endosulfan I	EPA-8081	U	MG/KG	0.010	02/08/2017	GAP
4,4-DDE	EPA-8081	U	MG/KG	0.010	02/08/2017	GAP
Dieldrin	EPA-8081	U	MG/KG	0.010	02/08/2017	GAP
Endrin	EPA-8081	U	MG/KG	0.010	02/08/2017	GAP
4,4-DDD	EPA-8081	U	MG/KG	0.010	02/08/2017	GAP
Endosulfan II	EPA-8081	U	MG/KG	0.010	02/08/2017	GAP
4,4-DDT	EPA-8081	U	MG/KG	0.010	02/08/2017	GAP
Endrin Aldehyde	EPA-8081	U	MG/KG	0.010	02/08/2017	GAP
Endosulfan Sulfate	EPA-8081	U	MG/KG	0.010	02/08/2017	GAP
Methoxychlor	EPA-8081	U	MG/KG	0.010	02/08/2017	GAP
Toxaphene	EPA-8081	U	MG/KG	0.50	02/08/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

MBLK-R289307 - Batch R289307 - Soil by EPA-8081

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
G-BHC	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
B-BHC	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
Heptachlor	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
D-BHC	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
Aldrin	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP



CERTIFICATE OF ANALYSIS

CLIENT: Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

DATE: 3/1/2017
ALS SDG#: EV17010155
WDOE ACCREDITATION: C601

CLIENT CONTACT: Thom Morin
CLIENT PROJECT: 74001

LABORATORY BLANK RESULTS

MBLK-R289307 - Batch R289307 - Soil by EPA-8081

Heptachlor Epoxide	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
Chlordane	EPA-8081	U	MG/KG	0.020	02/09/2017	GAP
Endosulfan I	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
4,4-DDE	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
Dieldrin	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
Endrin	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
4,4-DDD	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
Endosulfan II	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
4,4-DDT	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
Methoxychlor	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
Toxaphene	EPA-8081	U	MG/KG	0.50	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

MBLK-R289329 - Batch R289329 - Soil by EPA-8081

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
G-BHC	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
B-BHC	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
Heptachlor	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
D-BHC	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
Aldrin	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
Heptachlor Epoxide	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
Chlordane	EPA-8081	U	MG/KG	0.020	02/09/2017	GAP
Endosulfan I	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
4,4-DDE	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
Dieldrin	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
Endrin	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
4,4-DDD	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
Endosulfan II	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
4,4-DDT	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
Endrin Aldehyde	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
Endosulfan Sulfate	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
Methoxychlor	EPA-8081	U	MG/KG	0.010	02/09/2017	GAP
Toxaphene	EPA-8081	U	MG/KG	0.50	02/09/2017	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

DATE: 3/1/2017
ALS SDG#: EV17010155
WDOE ACCREDITATION: C601

CLIENT CONTACT: Thom Morin
CLIENT PROJECT: 74001

LABORATORY BLANK RESULTS

MBLK-R289318 - Batch R289318 - Water by EPA-8081

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
A-BHC	EPA-8081	U	UG/L	0.050	02/10/2017	GAP
G-BHC	EPA-8081	U	UG/L	0.050	02/10/2017	GAP
B-BHC	EPA-8081	U	UG/L	0.050	02/10/2017	GAP
Heptachlor	EPA-8081	U	UG/L	0.050	02/10/2017	GAP
D-BHC	EPA-8081	U	UG/L	0.050	02/10/2017	GAP
Aldrin	EPA-8081	U	UG/L	0.050	02/10/2017	GAP
Heptachlor Epoxide	EPA-8081	U	UG/L	0.050	02/10/2017	GAP
Chlordane	EPA-8081	U	UG/L	0.10	02/10/2017	GAP
Endosulfan I	EPA-8081	U	UG/L	0.050	02/10/2017	GAP
4,4-DDE	EPA-8081	U	UG/L	0.050	02/10/2017	GAP
Dieldrin	EPA-8081	U	UG/L	0.050	02/10/2017	GAP
Endrin	EPA-8081	U	UG/L	0.050	02/10/2017	GAP
4,4-DDD	EPA-8081	U	UG/L	0.050	02/10/2017	GAP
Endosulfan II	EPA-8081	U	UG/L	0.050	02/10/2017	GAP
4,4-DDT	EPA-8081	U	UG/L	0.050	02/10/2017	GAP
Endrin Aldehyde	EPA-8081	U	UG/L	0.050	02/10/2017	GAP
Endosulfan Sulfate	EPA-8081	U	UG/L	0.050	02/10/2017	GAP
Methoxychlor	EPA-8081	U	UG/L	0.050	02/10/2017	GAP
Toxaphene	EPA-8081	U	UG/L	2.0	02/10/2017	GAP

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CERTIFICATE OF ANALYSIS

CLIENT: Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

DATE: 3/1/2017
ALS SDG#: EV17010155
WDOE ACCREDITATION: C601

CLIENT CONTACT: Thom Morin
CLIENT PROJECT: 74001

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: R289272 - Soil by EPA-8081

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
G-BHC - BS	EPA-8081	122			33	155	02/08/2017	GAP
G-BHC - BSD	EPA-8081	137	12		33	155	02/08/2017	GAP
Heptachlor - BS	EPA-8081	136			49	142	02/08/2017	GAP
Heptachlor - BSD	EPA-8081	140	3		49	142	02/08/2017	GAP
Aldrin - BS	EPA-8081	131			37	149	02/08/2017	GAP
Aldrin - BSD	EPA-8081	129	1		37	149	02/08/2017	GAP
Dieldrin - BS	EPA-8081	103			65	137	02/08/2017	GAP
Dieldrin - BSD	EPA-8081	104	1		65	137	02/08/2017	GAP
Endrin - BS	EPA-8081	110			65	149	02/08/2017	GAP
Endrin - BSD	EPA-8081	108	1		65	149	02/08/2017	GAP
4,4-DDT - BS	EPA-8081	106			60	152	02/08/2017	GAP
4,4-DDT - BSD	EPA-8081	117	10		60	152	02/08/2017	GAP

ALS Test Batch ID: R289307 - Soil by EPA-8081

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
G-BHC - BS	EPA-8081	128			33	155	02/09/2017	GAP
G-BHC - BSD	EPA-8081	139	8		33	155	02/09/2017	GAP
Heptachlor - BS	EPA-8081	126			49	142	02/09/2017	GAP
Heptachlor - BSD	EPA-8081	131	4		49	142	02/09/2017	GAP
Aldrin - BS	EPA-8081	126			37	149	02/09/2017	GAP
Aldrin - BSD	EPA-8081	130	3		37	149	02/09/2017	GAP
Dieldrin - BS	EPA-8081	97.4			65	137	02/09/2017	GAP
Dieldrin - BSD	EPA-8081	101	4		65	137	02/09/2017	GAP
Endrin - BS	EPA-8081	99.8			65	149	02/09/2017	GAP
Endrin - BSD	EPA-8081	103	3		65	149	02/09/2017	GAP
4,4-DDT - BS	EPA-8081	111			60	152	02/09/2017	GAP
4,4-DDT - BSD	EPA-8081	115	4		60	152	02/09/2017	GAP

ALS Test Batch ID: R289329 - Soil by EPA-8081

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
G-BHC - BS	EPA-8081	144			33	155	02/09/2017	GAP
G-BHC - BSD	EPA-8081	126	13		33	155	02/09/2017	GAP
Heptachlor - BS	EPA-8081	143		SQ3	49	142	02/09/2017	GAP
Heptachlor - BSD	EPA-8081	123	15		49	142	02/09/2017	GAP
Aldrin - BS	EPA-8081	128			37	149	02/09/2017	GAP
Aldrin - BSD	EPA-8081	123	4		37	149	02/09/2017	GAP
Dieldrin - BS	EPA-8081	94.6			65	137	02/09/2017	GAP



CERTIFICATE OF ANALYSIS

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ALS SDG#: EV17010155
WDOE ACCREDITATION: C601

CLIENT CONTACT: Thom Morin
CLIENT PROJECT: 74001

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Dieldrin - BSD	EPA-8081	103	8		65	137	02/09/2017	GAP
Endrin - BS	EPA-8081	98.1			65	149	02/09/2017	GAP
Endrin - BSD	EPA-8081	107	9		65	149	02/09/2017	GAP
4,4-DDT - BS	EPA-8081	105			60	152	02/09/2017	GAP
4,4-DDT - BSD	EPA-8081	112	7		60	152	02/09/2017	GAP

SQ3 - Spike outside of control limits due to sporadic marginal failure. All other spikes in extraction fraction within control limits. No corrective action taken.

ALS Test Batch ID: R290212 - Soil by EPA-8081

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
G-BHC - BS	EPA-8081	135			33	155	02/21/2017	PAB
G-BHC - BSD	EPA-8081	96.9	33		33	155	02/21/2017	PAB
Heptachlor - BS	EPA-8081	143		SQ3	49	142	02/21/2017	PAB
Heptachlor - BSD	EPA-8081	107	29		49	142	02/21/2017	PAB
Aldrin - BS	EPA-8081	136			37	149	02/21/2017	PAB
Aldrin - BSD	EPA-8081	102	29		37	149	02/21/2017	PAB
Dieldrin - BS	EPA-8081	102			65	137	02/21/2017	PAB
Dieldrin - BSD	EPA-8081	75.9	29		65	137	02/21/2017	PAB
Endrin - BS	EPA-8081	108			65	149	02/21/2017	PAB
Endrin - BSD	EPA-8081	73.1	39		65	149	02/21/2017	PAB
4,4-DDT - BS	EPA-8081	113			60	152	02/21/2017	PAB
4,4-DDT - BSD	EPA-8081	76.3	39		60	152	02/21/2017	PAB

SQ3 - Spike outside of control limits due to sporadic marginal failure. All other spikes in extraction fraction within control limits. No corrective action taken.

ALS Test Batch ID: R290220 - Soil by EPA-8081

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
G-BHC - BS	EPA-8081	119			33	155	02/14/2017	PAB
G-BHC - BSD	EPA-8081	128	7		33	155	02/14/2017	PAB
Heptachlor - BS	EPA-8081	129			49	142	02/14/2017	PAB
Heptachlor - BSD	EPA-8081	142	10		49	142	02/14/2017	PAB
Aldrin - BS	EPA-8081	127			37	149	02/14/2017	PAB
Aldrin - BSD	EPA-8081	139	9		37	149	02/14/2017	PAB
Dieldrin - BS	EPA-8081	96.7			65	137	02/14/2017	PAB
Dieldrin - BSD	EPA-8081	97.7	1		65	137	02/14/2017	PAB
Endrin - BS	EPA-8081	99.8			65	149	02/14/2017	PAB
Endrin - BSD	EPA-8081	103	3		65	149	02/14/2017	PAB
4,4-DDT - BS	EPA-8081	113			60	152	02/14/2017	PAB
4,4-DDT - BSD	EPA-8081	114	1		60	152	02/14/2017	PAB



CERTIFICATE OF ANALYSIS

CLIENT: Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

DATE: 3/1/2017
ALS SDG#: EV17010155
WDOE ACCREDITATION: C601

CLIENT CONTACT: Thom Morin
CLIENT PROJECT: 74001

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: R289318 - Water by EPA-8081

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
G-BHC - BS	EPA-8081	109			18	158	02/10/2017	GAP
G-BHC - BSD	EPA-8081	130	18		18	158	02/10/2017	GAP
Heptachlor - BS	EPA-8081	119			30	134	02/10/2017	GAP
Heptachlor - BSD	EPA-8081	123	3		30	134	02/10/2017	GAP
Aldrin - BS	EPA-8081	98.7			5	137	02/10/2017	GAP
Aldrin - BSD	EPA-8081	114	14		5	137	02/10/2017	GAP
Dieldrin - BS	EPA-8081	91.4			55	137	02/10/2017	GAP
Dieldrin - BSD	EPA-8081	99.3	8		55	137	02/10/2017	GAP
Endrin - BS	EPA-8081	93.8			66	134	02/10/2017	GAP
Endrin - BSD	EPA-8081	103	10		66	134	02/10/2017	GAP
4,4-DDT - BS	EPA-8081	97.4			59	149	02/10/2017	GAP
4,4-DDT - BSD	EPA-8081	108	10		59	149	02/10/2017	GAP

APPROVED BY

Laboratory Director



ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
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Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only)

EV17010155

Date 1/25/17 Page 1 Of 9

PROJECT ID: 74001					ANALYSIS REQUESTED															OTHER (Specify)				
REPORT TO COMPANY: EPI					<input type="checkbox"/> NWTPH-HOIC <input type="checkbox"/> NWTPH-DX <input type="checkbox"/> NWTPH-GX <input type="checkbox"/> BTEX by EPA 8021 <input type="checkbox"/> BTEX by EPA 8260 <input type="checkbox"/> <input type="checkbox"/> MTBE by EPA 8021 <input type="checkbox"/> MTBE by EPA 8260 <input type="checkbox"/> <input type="checkbox"/> Halogenated Volatiles by EPA 8260 <input type="checkbox"/> Volatile Organic Compounds by EPA 8260 <input type="checkbox"/> EDB / EDC by EPA 8260 SIM (water) <input type="checkbox"/> EDB / EDC by EPA 8260 (soil) <input type="checkbox"/> Semivolatile Organic Compounds by EPA 8270 <input type="checkbox"/> Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM <input type="checkbox"/> PCB by EPA 8082 <input type="checkbox"/> Pesticides by EPA 8081 <input type="checkbox"/> <input type="checkbox"/> Metals-MTCA-5 <input type="checkbox"/> RCRA-8 <input type="checkbox"/> Pb <input type="checkbox"/> TAL <input type="checkbox"/> <input type="checkbox"/> Metals Other (Specify) <input type="checkbox"/> TCLP-Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-Vol <input type="checkbox"/> Pest <input type="checkbox"/> Herbs <input checked="" type="checkbox"/> organochlorine pesticides method 8081															PROJECT MANAGER: Thom Morin				
ADDRESS: 1180 NW Maple St.																								
Issaquah, WA 98027																								
PHONE: 425-355-0060 FAX:																								
P.O. #: E-MAIL:																								
INVOICE TO COMPANY: EPI					NUMBER OF CONTAINERS RECEIVED IN GOOD CONDITION?																			
ATTENTION:																								
ADDRESS:																								
SAMPLE I.D.	DATE	TIME	TYPE	LAB#																				
1. 13: Tee: 0.5	1/25/17	0830	Soil	1	X																			
2. 13: Tee: 1.0	1	0835	1	2	H																			
3. 13: Tee: 1.5	1	0840	1	3	H																			
4. 13: Fairway: 0.5	1	0910	1	4	H																			
5. 13: Fairway: 1.0	1	0915	1	5	H																			
6. 13: Fairway: 1.5	1	0930	1	6	H																			
7. 6: Tee: 0.5	1	0945	1	7	H																			
8. 6: Tee: 1.0	1	0950	1	8	H																			
9. 6: Tee: 1.5	1	0955	1	9	H																			
10. 14: Tee: 0.5	1	1010	1	10	H																			

SPECIAL INSTRUCTIONS H = Hold per Joe Sherrad 1/23/17

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Joe Sherrad, EPI 1/27/17, 1305
Received By: ALS 1/27/17 1305

2. Relinquished By:

Received By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis

10 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis

5 3 1 SAME DAY

OTHER:

Specify:

*Turnaround request less than standard may incur Rush Charges



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8620 Holly Drive, Suite 100
Everett, WA 98208
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Fax (425) 356-2626
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Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only)

617010155

Date 1/25/17 Page 2 Of 9

PROJECT ID: 74001					ANALYSIS REQUESTED															OTHER (Specify)	
REPORT TO COMPANY: EPI					<input type="checkbox"/> NWTPH-HCID <input type="checkbox"/> NWTPH-DX <input type="checkbox"/> NWTPH-GX <input type="checkbox"/> BTEX by EPA 8021 <input type="checkbox"/> BTEX by EPA 8260 <input type="checkbox"/> <input type="checkbox"/> MTBE by EPA 8021 <input type="checkbox"/> MTBE by EPA 8260 <input type="checkbox"/> <input type="checkbox"/> Halogenated Volatiles by EPA 8260 <input type="checkbox"/> Volatile Organic Compounds by EPA 8260 <input type="checkbox"/> EDB / EDC by EPA 8260 SIM (water) <input type="checkbox"/> EDB / EDC by EPA 8260 (soil) <input type="checkbox"/> Semivolatile Organic Compounds by EPA 8270 <input type="checkbox"/> Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM <input type="checkbox"/> PCB by EPA 8082 <input type="checkbox"/> Pesticides by EPA 8081 <input type="checkbox"/> <input type="checkbox"/> Metals-MTCA-5 <input type="checkbox"/> RCRA-8 <input type="checkbox"/> Pri Pol <input type="checkbox"/> TAL <input type="checkbox"/> <input type="checkbox"/> Metals Other (Specify) <input type="checkbox"/> TCLP-Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-Vol <input type="checkbox"/> Pest <input type="checkbox"/> Herbs <input type="checkbox"/> <input checked="" type="checkbox"/> Organochlorine Pesticides method 8081															NUMBER OF CONTAINERS RECEIVED IN GOOD CONDITION?	
PROJECT MANAGER: Thom Morih																					
ADDRESS: 1180 NW Maple St. Issaquah, WA 98027																					
PHONE: 425-395-001 FAX:																					
P.O. #: E-MAIL:																					
INVOICE TO COMPANY: EPI																					
ATTENTION:																					
ADDRESS:																					
SAMPLE I.D.	DATE	TIME	TYPE	LAB#																	
1. 14: Tee: 1.0	1/25/17	1015	Soil	11	X																
2. 14: Tee: 1.5		1020		12	H																
3. 5: Green: 0.5		1035		13																	
4. 5: Green: 1.0		1040		14																	
5. 5: Green: 1.5		1045		15	H																
6. 5: Fairway: 0.5		1055		16																	
7. 5: Fairway: 1.0		1100		17																	
8. 5: Fairway: 1.5		1105		18	H																
9. 11: Fairway: 0.5		1215		19																	
10. 11: Fairway: 1.0	✓	1220	✓	20	✓																

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

- Relinquished By: Joe Shewell, EPT, 427/17, 13:05
Received By: ALS 1/27/17 13:05
- Relinquished By: _____
Received By: _____

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis

10 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis

5 3 1 SAME DAY

OTHER:

Specify: _____

*Turnaround request less than standard may incur Rush Charges



ALS Environmental
8620 Holly Drive, Suite 100
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Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only)

617010155

Date 1/25/17 Page 3 Of 9

PROJECT ID: <u>74001</u>					ANALYSIS REQUESTED															OTHER (Specify)	
REPORT TO COMPANY: <u>EPI</u>					<input type="checkbox"/> NWTPH-HCID <input type="checkbox"/> NWTPH-DX <input type="checkbox"/> NWTPH-GX <input type="checkbox"/> BTEX by EPA 8021 <input type="checkbox"/> BTEX by EPA 8260 <input type="checkbox"/> <input type="checkbox"/> MTBE by EPA 8021 <input type="checkbox"/> MTBE by EPA 8260 <input type="checkbox"/> <input type="checkbox"/> Halogenated Volatiles by EPA 8260 <input type="checkbox"/> Volatile Organic Compounds by EPA 8260 <input type="checkbox"/> EDB / EDC by EPA 8260 SIM (water) <input type="checkbox"/> EDB / EDC by EPA 8260 (soil) <input type="checkbox"/> Semivolatile Organic Compounds by EPA 8270 <input type="checkbox"/> Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM <input type="checkbox"/> PCB by EPA 8082 <input type="checkbox"/> Pesticides by EPA 8081 <input type="checkbox"/> <input type="checkbox"/> Metals-MTCA-5 <input type="checkbox"/> RCRA-8 <input type="checkbox"/> Pb <input type="checkbox"/> Cd <input type="checkbox"/> Cu <input type="checkbox"/> Zn <input type="checkbox"/> Ni <input type="checkbox"/> Cr <input type="checkbox"/> Mn <input type="checkbox"/> Fe <input type="checkbox"/> Al <input type="checkbox"/> Si <input type="checkbox"/> Ti <input type="checkbox"/> V <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Cu <input type="checkbox"/> Zn <input type="checkbox"/> Pb <input type="checkbox"/> Ag <input type="checkbox"/> Au <input type="checkbox"/> Pt <input type="checkbox"/> Pd <input type="checkbox"/> Bi <input type="checkbox"/> Sb <input type="checkbox"/> Sn <input type="checkbox"/> Se <input type="checkbox"/> Te <input type="checkbox"/> Mo <input type="checkbox"/> W <input type="checkbox"/> U <input type="checkbox"/> Th <input type="checkbox"/> Pa <input type="checkbox"/> Np <input type="checkbox"/> Pu <input type="checkbox"/> Am <input type="checkbox"/> Cm <input type="checkbox"/> Bk <input type="checkbox"/> Cf <input type="checkbox"/> Es <input type="checkbox"/> Fm <input type="checkbox"/> Md <input type="checkbox"/> No <input type="checkbox"/> Lr <input type="checkbox"/> Yt <input type="checkbox"/> La <input type="checkbox"/> Ce <input type="checkbox"/> Pr <input type="checkbox"/> Nd <input type="checkbox"/> Pm <input type="checkbox"/> Sm <input type="checkbox"/> Eu <input type="checkbox"/> Gd <input type="checkbox"/> Tb <input type="checkbox"/> Dy <input type="checkbox"/> Ho <input type="checkbox"/> Er <input type="checkbox"/> Tm <input type="checkbox"/> Yb <input type="checkbox"/> Lu <input type="checkbox"/> Metals Other (Specify) <input type="checkbox"/> TCLP-Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-Vol <input type="checkbox"/> Pest <input type="checkbox"/> Herbs <input type="checkbox"/> <u>organochlorine pesticides</u> <u>method 8061</u>															NUMBER OF CONTAINERS RECEIVED IN GOOD CONDITION?	
PROJECT MANAGER: <u>Thom Morih</u>																					
ADDRESS: <u>1180 NW Maple St.</u> <u>Issaquah, WA 98027</u>																					
PHONE: <u>425-395-0010</u> FAX:																					
P.O. #: E-MAIL:																					
INVOICE TO COMPANY: <u>EPI</u>																					
ATTENTION:																					
ADDRESS:																					
SAMPLE I.D.	DATE	TIME	TYPE	LAB#																	
1. 11: Fairway: 1.5	1/25/17	1225	Soil	21	X																
2. 12: Tee: 0.5		1245		22	H																
3. 12: Tee: 1.0		1250		23																	
4. 12: Tee: 1.5		1255		24	H																
5. 6: Green: 0.5		1305		25																	
6. 6: Green: 1.0		1310		26																	
7. 6: Green: 1.5		1315		27	H																
8. 1: Tee: 0.5		1335		28																	
9. 1: Tee: 1.0		1340		29																	
10. 1: Tee: 1.5	✓	1345	✓	30	✓ H ✓																

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Joe Slant, EPT, 1/27/17, 1305
Received By: ALS 1/27/17 1305
2. Relinquished By: _____
Received By: _____

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis

10 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis

5 3 1 SAME DAY

OTHER:

Specify: _____

*Turnaround request less than standard may incur Rush Charges



ALS Environmental
8620 Holly Drive, Suite 100
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Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only)

EV17010155

Date 11/25/17 Page 4 of 9

PROJECT ID: 74001					ANALYSIS REQUESTED															OTHER (Specify)	
REPORT TO COMPANY: EPI					<input type="checkbox"/> NWTPH-HCID <input type="checkbox"/> NWTPH-DX <input type="checkbox"/> NWTPH-GX <input type="checkbox"/> BTEX by EPA 8021 <input type="checkbox"/> BTEX by EPA 8260 <input type="checkbox"/> <input type="checkbox"/> MTBE by EPA 8021 <input type="checkbox"/> MTBE by EPA 8260 <input type="checkbox"/> <input type="checkbox"/> Halogenated Volatiles by EPA 8260 <input type="checkbox"/> Volatile Organic Compounds by EPA 8260 <input type="checkbox"/> EDB / EDC by EPA 8260 SIM (water) <input type="checkbox"/> EDB / EDC by EPA 8260 (soil) <input type="checkbox"/> Semivolatile Organic Compounds by EPA 8270 <input type="checkbox"/> Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM <input type="checkbox"/> PCB by EPA 8082 <input type="checkbox"/> Pesticides by EPA 8081 <input type="checkbox"/> <input type="checkbox"/> Metals-MTCA-5 <input type="checkbox"/> RCRA-8 <input type="checkbox"/> PH Pol <input type="checkbox"/> TAL <input type="checkbox"/> <input type="checkbox"/> Metals Other (Specify) <input type="checkbox"/> TCLP-Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-Vol <input type="checkbox"/> Pest <input type="checkbox"/> Herbs <input type="checkbox"/> Organochlorine pesticides method 8081															NUMBER OF CONTAINERS RECEIVED IN GOOD CONDITION?	
PROJECT MANAGER: Thom Moris																					
ADDRESS: 1180 NW Maple St. Issaquah, WA 98027																					
PHONE: 425-395-0010 FAX:																					
P.O. #: E-MAIL:																					
INVOICE TO COMPANY: EPI																					
ATTENTION:																					
ADDRESS:																					
SAMPLE I.D.	DATE	TIME	TYPE	LAB#																	
1. 1: Green: 0.5	11/25/17	1400	soil	31																	
2. 1: Green: 1.0	↓	1405	↓	32																	
3. 1: Green: 1.5	✓	1410	↓	33																	
4. 14: Green: 0.5	11/26/17	0755	↓	34																	
5. 14: Green: 1.0	↓	0800	↓	35																	
6. 14: Green: 1.5	↓	0805	↓	36																	
7. 15: Fairway: 0.5	↓	0810	↓	37																	
8. 15: Fairway: 1.0	↓	0815	↓	38																	
9. 15: Fairway: 1.5	↓	0820	↓	39																	
10. 16: Green: 0.5	✓	0805	✓	40																	

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Joe Smith, EPI, 11/27/17, 1305
 Received By: ALS, 11/29/17, 1305
2. Relinquished By: _____
 Received By: _____

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis

10 5 3 2 1 SAME DRY

Fuels & Hydrocarbon Analysis

5 3 1 SAME DRY

OTHER:

Specify: _____

*Turnaround request less than standard may incur Rush Charges



ALS Job# (Laboratory Use Only)

FV17010155

Date 1/26/17 Page 5 Of 6

[illegible]

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Joe Sherrill, EPI 1/27/17, BOS
Received By: [Signature] AUS 1/27/17 BOS

2. Relinquished By:

Received By:

TURNAROUND REQUESTED in Business Days*

OTHER:

Organic, Metals & Inorganic Analysis

10 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis

5 3 1 SAME DAY

Specify: _____

*Turnaround request less than standard may incur Rush Charges



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8620 Holly Drive, Suite 100
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Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only)

EV17010155

Date 11/26/17 Page 6 Of 9

PROJECT ID: 74001					ANALYSIS REQUESTED															OTHER (Specify)			
REPORT TO COMPANY: EPI					<input type="checkbox"/> NWTPH-HCID <input type="checkbox"/> NWTPH-DX <input type="checkbox"/> NWTPH-GX <input type="checkbox"/> BTEX by EPA 8021 <input type="checkbox"/> BTEX by EPA 8260 <input type="checkbox"/> <input type="checkbox"/> MTBE by EPA 8021 <input type="checkbox"/> MTBE by EPA 8260 <input type="checkbox"/> <input type="checkbox"/> Halogenated Volatiles by EPA 8260 <input type="checkbox"/> Volatile Organic Compounds by EPA 8260 <input type="checkbox"/> EDB / EDC by EPA 8260 SIM (water) <input type="checkbox"/> EDB / EDC by EPA 8260 (soil) <input type="checkbox"/> Semivolatile Organic Compounds by EPA 8270 <input type="checkbox"/> Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM <input type="checkbox"/> PCB by EPA 8082 <input type="checkbox"/> Pesticides by EPA 8081 <input type="checkbox"/> <input type="checkbox"/> Metals-MTCA-5 <input type="checkbox"/> RCRA-8 <input type="checkbox"/> Pri Pol <input type="checkbox"/> TAL <input type="checkbox"/> <input type="checkbox"/> Metals Other (Specify) <input type="checkbox"/> TCLP-Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-Vol <input type="checkbox"/> Pest <input type="checkbox"/> Herbs <input type="checkbox"/> Organochlorine Pesticides method 8081																	NUMBER OF CONTAINERS RECEIVED IN GOOD CONDITION?	
PROJECT MANAGER: Thom Marin																							
ADDRESS: 1180 NW Maple St.																							
Issaquah, WA 98027																							
PHONE: 425-395-0000 FAX:																							
P.O. #: E-MAIL:																							
INVOICE TO COMPANY: EPI																							
ATTENTION:																							
ADDRESS:																							
SAMPLE I.D.	DATE	TIME	TYPE	LAB#																			
1. 18" Green : 1.5	11/26/17	1025	Soil	51	X H 1																		
2. 4" Fairway : 0.5		1145		52	H																		
3. 4" Fairway : 1.0		1150		53	H																		
4. 4" Fairway : 1.5		1155		54	H																		
5. 4" Tee : 0.5		1220		55	H																		
6. 4" Tee : 1.0		1225		56	H																		
7. 4" Tee : 1.5		1230		57	H																		
8. 7" Fairway : 0.5		1255		58	H																		
9. 7" Fairway : 1.0		1300		59	H																		
10. 7" Fairway : 1.5	↓	1305	↓	60	↓ H ✓																		

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: J. J. Sherrill, EPI 11/27/17 1305
 Received By: ALS 11/27/17 1305
2. Relinquished By: _____
 Received By: _____

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis

10 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis

5 3 1 SAME DAY

OTHER:

Specify: _____

*Turnaround request less than standard may incur Rush Charges



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Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only)

EV170101SS

Date 1/26/17 Page 7 Of 9

PROJECT ID: 74001					ANALYSIS REQUESTED															OTHER (Specify)	
REPORT TO COMPANY: EPI					<input type="checkbox"/> NWTPH-HCID <input type="checkbox"/> NWTPH-DX <input type="checkbox"/> NWTPH-GX <input type="checkbox"/> BTEX by EPA 8021 <input type="checkbox"/> BTEX by EPA 8260 <input type="checkbox"/> <input type="checkbox"/> MTBE by EPA 8021 <input type="checkbox"/> MTBE by EPA 8260 <input type="checkbox"/> <input type="checkbox"/> Halogenated Volatiles by EPA 8260 <input type="checkbox"/> Volatile Organic Compounds by EPA 8260 <input type="checkbox"/> EDB / EDC by EPA 8260 SIM (water) <input type="checkbox"/> EDB / EDC by EPA 8260 (soil) <input type="checkbox"/> Semivolatile Organic Compounds by EPA 8270 <input type="checkbox"/> Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM <input type="checkbox"/> PCB by EPA 8082 <input type="checkbox"/> Pesticides by EPA 8081 <input type="checkbox"/> <input type="checkbox"/> Metals-MTCA-5 <input type="checkbox"/> PCRA-8 <input type="checkbox"/> Pb Pol <input type="checkbox"/> TAL <input type="checkbox"/> <input type="checkbox"/> Metals Other (Specify) <input type="checkbox"/> TCLP-Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-Vol <input type="checkbox"/> Pest <input type="checkbox"/> Herbs organochlorine pesticides method 8081 Hold															NUMBER OF CONTAINERS RECEIVED IN GOOD CONDITION?	
PROJECT MANAGER: Thom March																					
ADDRESS: 1180 NW Maple St. Issaquah, WA 98027																					
PHONE: 425-355-6010 FAX:																					
P.O. #: E-MAIL:																					
INVOICE TO COMPANY: EPI																					
ATTENTION:																					
ADDRESS:																					
SAMPLE I.D.	DATE	TIME	TYPE	LAB#																	
1. 7: Green: 0.5	1/26/17	1330	Soil	61																	
2. 7: Green: 1.0	1/26/17	1335	Soil	62																	
3. 7: Green: 1.5	1/26/17	1340	Soil	63																	
4. 3: Tee: 0.5	1/27/17	800	Soil	64																	
5. 3: Tee: 1.0	1/27/17	805	Soil	65																	
6. 3: Tee: 1.5	1/27/17	810	Soil	66																	
7. 2: Fairway: 0.5	1/27/17	825	Soil	67																	
8. 2: Fairway: 1.0	1/27/17	830	Soil	68																	
9. 2: Fairway: 1.5	1/27/17	835	Soil	69																	
10. 10: Tee: 0.5	1/27/17	850	Soil	70																	

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

- Relinquished By: J. Sherrill, EPI, 1/27/17, 1305
Received By: ALS 1/27/17 BOS
- Relinquished By: _____
Received By: _____

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis

10 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis

5 3 1 SAME DAY

OTHER:

Specify: _____

*Turnaround request less than standard may incur Rush Charges



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8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only)

EV17010155

Date 1/27/17 Page 8 Of 9

PROJECT ID: 74001					ANALYSIS REQUESTED															OTHER (Specify)	
REPORT TO COMPANY: EPI					<input type="checkbox"/> NWTPH-HCID <input type="checkbox"/> NWTPH-DX <input type="checkbox"/> NWTPH-GX <input type="checkbox"/> BTEX by EPA 8021 <input type="checkbox"/> BTEX by EPA 8260 <input type="checkbox"/> <input type="checkbox"/> MTBE by EPA 8021 <input type="checkbox"/> MTBE by EPA 8260 <input type="checkbox"/> <input type="checkbox"/> Halogenated Volatiles by EPA 8260 <input type="checkbox"/> Volatile Organic Compounds by EPA 8260 <input type="checkbox"/> EDB / EDC by EPA 8260 SIM (water) <input type="checkbox"/> EDB / EDC by EPA 8260 (soil) <input type="checkbox"/> Semivolatile Organic Compounds by EPA 8270 <input type="checkbox"/> Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM <input type="checkbox"/> PCB by EPA 8082 <input type="checkbox"/> Pesticides by EPA 8081 <input type="checkbox"/> <input type="checkbox"/> Metals-MTCA-5 <input type="checkbox"/> RCRA-8 <input type="checkbox"/> Pri Pol <input type="checkbox"/> TAL <input type="checkbox"/> <input type="checkbox"/> Metals Other (Specify) <input type="checkbox"/> TCLP-Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-Vol <input type="checkbox"/> Pest <input type="checkbox"/> Herbs <input type="checkbox"/> Organochlorine Pesticides Method 8081 Hold NUMBER OF CONTAINERS RECEIVED IN GOOD CONDITION?																
PROJECT MANAGER: Thom Morin																					
ADDRESS: 1180 NW Maple St Issaquah, WA 98027																					
PHONE: FAX:																					
P.O. #: E-MAIL:																					
INVOICE TO COMPANY: EPI																					
ATTENTION:																					
ADDRESS:																					
Soil																					
SAMPLE I.D.	DATE	TIME	TYPE	LAB#																	
1. 10: Tee: 1.0	1/27/17	855	21	71																	
2. 10: Tee: 1.5	1/27/17	900		72																	
3. 9: Green: 0.5	1/27/17	910		73																	
4. 9: Green: 1.0	1/27/17	915		74																	
5. 9: Green: 1.5	1/27/17	920		75																	
6. 10: Green: 0.5	1/27/17	925		76																	
7. 10: Green: 1.0	1/27/17	930		77																	
8. 10: Green: 1.5	1/27/17	935		78																	
9. 16: Fairway: 0.5	1/27/17	1000		79																	
10. 16: Fairway: 1.0	1/27/17	1005		80																	

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Jee Sherry EPI, 1/27/17, 1305
Received By: ALS 1/29/17 1305
2. Relinquished By: _____
Received By: _____

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis

10 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis

5 3 1 SAME DAY

OTHER:

Specify: _____

*Turnaround request less than standard may incur Rush Charges



ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only)

EV17010155

Date 1/27/17 Page 9 Of 9

PROJECT ID: <u>74001</u>					ANALYSIS REQUESTED															OTHER (Specify)	
REPORT TO COMPANY: <u>EPI</u>					<input type="checkbox"/> NWTPH-HCID <input type="checkbox"/> NWTPH-DX <input type="checkbox"/> NWTPH-GX <input type="checkbox"/> BTEX by EPA 8021 <input type="checkbox"/> BTEX by EPA 8260 <input type="checkbox"/> <input type="checkbox"/> MTBE by EPA 8021 <input type="checkbox"/> MTBE by EPA 8260 <input type="checkbox"/> <input type="checkbox"/> Halogenated Volatiles by EPA 8260 <input type="checkbox"/> Volatile Organic Compounds by EPA 8260 <input type="checkbox"/> EDB / EDC by EPA 8260 SIM (water) <input type="checkbox"/> EDB / EDC by EPA 8260 (soil) <input type="checkbox"/> Semivolatile Organic Compounds by EPA 8270 <input type="checkbox"/> Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM <input type="checkbox"/> PCB by EPA 8062 <input type="checkbox"/> Pesticides by EPA 8081 <input type="checkbox"/> <input type="checkbox"/> Metals-MTCA-5 <input type="checkbox"/> RCRA-8 <input type="checkbox"/> Pri Pol <input type="checkbox"/> TAL <input type="checkbox"/> <input type="checkbox"/> Metals Other (Specify) <input type="checkbox"/> TCLP-Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-Vol <input type="checkbox"/> Past <input type="checkbox"/> Herbs <input type="checkbox"/> <u>Organochlorine Pesticides Method 8081</u> <u>Hol</u>															NUMBER OF CONTAINERS RECEIVED IN GOOD CONDITION?	
PROJECT MANAGER: <u>Thom Merin</u>																					
ADDRESS: <u>180 NW Maple St</u> <u>Issaquah, WA 9812</u>																					
PHONE: _____ FAX: _____																					
P.O. #: _____ E-MAIL: _____																					
INVOICE TO COMPANY: <u>EPI</u>																					
ATTENTION: _____																					
ADDRESS: _____																					
SAMPLE I.D.	DATE	TIME	TYPE	LAB#																	
1. <u>16 Fairway 1.5</u>	<u>1/27/17</u>	<u>1010</u>	<u>Soil</u>	<u>81</u>																	
2. <u>Well</u>	<u>1/27/17</u>	<u>1040</u>	<u>H₂O</u>	<u>82</u>																	
3. <u>Pond</u>	<u>1/27/17</u>	<u>1050</u>	<u>H₂O</u>	<u>83</u>																	
4.																					
5.																					
6.																					
7.																					
8.																					
9.																					
10.																					

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Joe Shuck, EPI, 1/27/17, 1305
Received By: ALS 1/27/17 1305
2. Relinquished By: _____
Received By: _____

TURNAROUND REQUESTED in Business Days*
Organic, Metals & Inorganic Analysis OTHER:

10 Standard	5	3	2	1	SAME DAY
Fuels & Hydrocarbon Analysis					
5 Standard	3	1	SAME DAY		

Specify: _____

*Turnaround request less than standard may incur Rush Charges

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

May 11, 2018

Beau Johnson, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 804290

Dear Mr Johnson:

Included are the results from the testing of material submitted on April 17, 2018 from the Brookdale 74001, F&BI 804290 project. There are 43 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0511R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 17, 2018 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 804290 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
804290 -01	Green1-NW:0.5
804290 -02	Green1-NW:1.0
804290 -03	Green1-NW:1.5
804290 -04	Green1-NW:2.0
804290 -05	Green1-SW:0.5
804290 -06	Green1-SW:1.0
804290 -07	Green 1-SW:1.5
804290 -08	Green 1-SW:2.0
804290 -09	Green 1-E:0.5
804290 -10	Green 1-E:1.0
804290 -11	Green 1-E:1.5
804290 -12	Green 1-E:2.0
804290 -13	Green 2:0.5
804290 -14	Green 2:1.0
804290 -15	Green 2:1.5
804290 -16	Green 2:2.0
804290 -17	Green 2-E:0.5
804290 -18	Green 2-E:1.0
804290 -19	Green 2-E:1.5
804290 -20	Green 2-E:2.0
804290 -21	Green 2-SW:0.5
804290 -22	Green 2-SW:1.0
804290 -23	Green 2-SW:1.5
804290 -24	Green 2-SW:2.0
804290 -25	Green 2-NW:0.5
804290 -26	Green 2-NW:1.0
804290 -27	Green 2-NW:1.5
804290 -28	Green 2-NW:2.0
804290 -29	Green 3-NW:0.5
804290 -30	Green 3-NW:1.0
804290 -31	Green 3-NW:1.5
804290 -32	Green 3-NW:2.0
804290 -33	Green 3-S:0.5
804290 -34	Green 3-S:1.0
804290 -35	Green 3-S:1.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (Continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
804290 -36	Green 3-S:2.0
804290 -37	Green 3-NE:0.5
804290 -38	Green 3-NE:1.0
804290 -39	Green 3-NE:1.5
804290 -40	Green 3-NE:2.0
804290 -41	Green 3:0.5
804290 -42	Green 3:1.0
804290 -43	Green 3:1.5
804290 -44	Green 3:2.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green1-NW:0.5	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	804290-01 1/6
Date Analyzed:	04/18/18	Data File:	041809.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.31

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green1-NW:1.0	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	804290-02 1/6
Date Analyzed:	04/18/18	Data File:	041810.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.16

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green1-NW:2.0	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/26/18	Lab ID:	804290-04 1/6
Date Analyzed:	04/30/18	Data File:	043027.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.047

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green1-SW:0.5	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	804290-05 1/6
Date Analyzed:	04/18/18	Data File:	041811.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.42

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green1-SW:1.0	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	804290-06 1/6
Date Analyzed:	04/18/18	Data File:	041812.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.20

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 1-SW:2.0	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/26/18	Lab ID:	804290-08 1/6
Date Analyzed:	04/30/18	Data File:	043028.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.036

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 1-E:0.5	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	804290-09 1/6
Date Analyzed:	04/18/18	Data File:	041813.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.68

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 1-E:1.0	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	804290-10 1/6
Date Analyzed:	04/18/18	Data File:	041814.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.15

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 1-E:2.0	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/26/18	Lab ID:	804290-12 1/6
Date Analyzed:	04/30/18	Data File:	043029.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.060

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 2:0.5	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	804290-13 1/6
Date Analyzed:	04/18/18	Data File:	041815.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.20

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 2:1.0	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	804290-14 1/6
Date Analyzed:	04/18/18	Data File:	041816.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.044

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 2-E:0.5	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	804290-17 1/6
Date Analyzed:	04/18/18	Data File:	041817.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.39

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 2-E:1.0	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	804290-18 1/6
Date Analyzed:	04/18/18	Data File:	041818.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.17

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 2-E:2.0	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/26/18	Lab ID:	804290-20 1/6
Date Analyzed:	04/30/18	Data File:	043030.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.048

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 2-SW:0.5	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	804290-21 1/60
Date Analyzed:	04/20/18	Data File:	042051.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77 d	50	150
DBC	120 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	4.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 2-SW:1.0	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	804290-22 1/6
Date Analyzed:	04/18/18	Data File:	041824.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.57

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 2-SW:2.0	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/26/18	Lab ID:	804290-24 1/6
Date Analyzed:	04/30/18	Data File:	043031.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.14

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 2-NW:0.5	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	804290-25 1/6
Date Analyzed:	04/18/18	Data File:	041825.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.064

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 2-NW:1.0	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	804290-26 1/6
Date Analyzed:	04/18/18	Data File:	041826.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.013

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 3-NW:0.5	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	804290-29 1/6
Date Analyzed:	04/18/18	Data File:	041827.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.83

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 3-NW:1.0	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	804290-30 1/6
Date Analyzed:	04/18/18	Data File:	041828.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.56

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 3-NW:2.0	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/26/18	Lab ID:	804290-32 1/6
Date Analyzed:	04/30/18	Data File:	043032.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.18

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 3-S:0.5	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	804290-33 1/6
Date Analyzed:	04/18/18	Data File:	041829.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.99

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 3-S:1.0	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	804290-34 1/6
Date Analyzed:	04/18/18	Data File:	041837.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.72

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 3-S:2.0	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/26/18	Lab ID:	804290-36 1/6
Date Analyzed:	04/30/18	Data File:	043033.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.042

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 3-NE:0.5	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	804290-37 1/6
Date Analyzed:	04/18/18	Data File:	041838.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.65

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 3-NE:1.0	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	804290-38 1/6
Date Analyzed:	04/18/18	Data File:	041839.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.072

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 3-NE:1.5	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/26/18	Lab ID:	804290-39 1/6
Date Analyzed:	04/30/18	Data File:	043037.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 3-NE:2.0 ht	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	05/03/18	Lab ID:	804290-40 1/6
Date Analyzed:	05/06/18	Data File:	050642.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 3:0.5	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	804290-41 1/60
Date Analyzed:	04/20/18	Data File:	042052.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84 d	50	150
DBC	92 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 3:1.0	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	804290-42 1/6
Date Analyzed:	04/18/18	Data File:	041841.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.33

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 3:2.0	Client:	Environmental Partners
Date Received:	04/17/18	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/26/18	Lab ID:	804290-44 1/6
Date Analyzed:	04/30/18	Data File:	043038.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	08-827 mb 1/6
Date Analyzed:	04/18/18	Data File:	041823.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/17/18	Lab ID:	08-764 mb2 1/6
Date Analyzed:	04/18/18	Data File:	041808.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	04/26/18	Lab ID:	08-918 mb 1/6
Date Analyzed:	04/30/18	Data File:	043019.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	95	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 804290
Date Extracted:	05/03/18	Lab ID:	08-971 mb2 1/6
Date Analyzed:	05/06/18	Data File:	050610.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/11/18

Date Received: 04/17/18

Project: Brookdale 74001, F&BI 804290

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804290-21 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	3.9 ve	0 b	0 b	50-150	nm

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	97	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/11/18

Date Received: 04/17/18

Project: Brookdale 74001, F&BI 804290

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804168-01 1/6 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	<0.01	<0.01	nm

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	84	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/11/18

Date Received: 04/17/18

Project: Brookdale 74001, F&BI 804290

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804303-07 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.027	79 b	70 b	50-150	12 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	91	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/11/18

Date Received: 04/17/18

Project: Brookdale 74001, F&BI 804290

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 805024-42 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.13	126 b	128 b	50-150	2 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	102	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

ME 4/17/18

Page # 1 of 5 B05

Report To Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature) <u>Beau Johnson</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001</u> <u>74401</u> per other projects per 3/11/18
REMARKS * Pieldrin only per BT me 4/17/18	INVOICE TO <u>EPI</u>

TURNAROUND TIME	
<input checked="" type="checkbox"/> Standard Turnaround	<input type="checkbox"/> RUSH
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	<input checked="" type="checkbox"/> Archive Samples
<input type="checkbox"/> Other	

						ANALYSES REQUESTED												Notes
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081					
Green 1 - NW - 0.5	01	4/16/18	0855	Soil	1								X					* Archive all
Green 1 - NW - 1.0	02		0856		1								X					samples not
Green 1 - NW - 1.5	03		0910		1													marked for
Green 1 - NW - 2.0	04		0925		1													immediate
Green 1 - SW - 0.5	05		0934		1								X					analysis.
Green 1 - SW - 1.0	06		0936		1								X					◆ - per BT
Green 1 - SW - 1.5	07		0942		1													4/25/18 ME
Green 1 - SW - 2.0	08		0955		1													
Green 1 - E - 0.5	09		1003		1								X					
Green 1 - E - 1.0	10	✓	1005	✓	1								X					

Samples received at 4 °C

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Beau Johnson</u>	<u>Beau Johnson</u>	<u>EPI</u>	<u>4-17-18</u>	<u>11:42</u>
Received by: <u>Cristian Baldeon</u>	<u>CRISTIAN BALDEON</u>	<u>FEDEx</u>	<u>4-17-18</u>	<u>11:42</u>
Relinquished by:				
Received by: <u>Nhan Phan</u>	<u>Nhan Phan</u>	<u>FE B.T</u>	<u>4/17/18</u>	<u>1230</u>

SAMPLE CHAIN OF CUSTODY

ME 4/17/18

Page # 2 of 5 B05

Report To Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0000 Email beauj@epi-wa.com

SAMPLERS (signature) <u>Blitz Wrig</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001</u>
REMARKS	INVOICE TO <u>EPI</u>

TURNAROUND TIME	
<input checked="" type="checkbox"/> Standard Turnaround	
<input type="checkbox"/> RUSH	
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	
<input checked="" type="checkbox"/> Archive Samples	
<input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081				
Green 1 - E: 1.5	11	4/16/18	1020	Soil	1												* Archive all samples not marked for immediate analysis.
Green 1 - E: 2.0	12		1025		1												
Green 2: 0.5	13		1046		1								X				
Green 2: 1.0	14		1051		1								X				
Green 2: 1.5	15		1056		1												
Green 2: 2.0	16		1110		1												
Green 2 - E: 0.5	17		1120		1								X				
Green 2 - E: 1.0	18		1123		1								X				
Green 2 - E: 1.5	19		1130		1												
Green 2 - E: 2.0	20		1137		1												

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Beau Johnson</u>	<u>EPI</u>	<u>4-17-18</u>	<u>1142</u>
Received by: <u>[Signature]</u>	<u>CRISTIAN BALDELOAN</u>	<u>FEDEX</u>	<u>4-17-18</u>	<u>1142</u>
Relinquished by:				
Received by: <u>[Signature]</u>	<u>Nhan Pham</u>	<u>FEDEX</u>	<u>4/17/18</u>	<u>1230</u>

804240

SAMPLE CHAIN OF CUSTODY

ME 4/17/18

Page # 3 of 5 B05

Report To Beau Johnson

Company EPI

Address 1180 NW Maple St, Suite 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email beaulj@epi-wa.com

SAMPLERS (signature)

Betsy Wing

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPI

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other



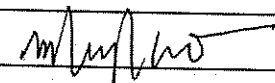
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081			
Green 2 - SW : 0.5	21	4/16/18	1145	Soil	1								X			* Archive all
Green 2 - SW : 1.0	22	↓	1147	↓	1								X			samples not
Green 2 - SW : 1.5	23	↓	1150	↓	1											marked for
Green 2 - SW : 2.0	24	✓	1156	✓	1								◆			immediate analy.
4-17-18																

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by:		Beau Johnson	EPI	4-17-18	1142		
Received by:		CRISTIAN BALDEOMAN	FEDEX	4-17-18	1142		
Relinquished by:							
Received by:		Nhan Phan	FeBT	4-17-18	1230		

SAMPLE CHAIN OF CUSTODY

ME 4/17/18

Page # 4 of 5

BOS

Report BEAN JHANNSON
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature) <u>Betsy Ong</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001</u>
REMARKS	INVOICE TO <u>EPI</u>

TURNAROUND TIME	
<input checked="" type="checkbox"/> Standard Turnaround	
<input type="checkbox"/> RUSH	
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	
<input checked="" type="checkbox"/> Archive Samples	
<input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081			
GREEN 2 - NW: 0.5	25	4/16/18	12:04	soil	1								X			* Archive all samples not marked for immediate analysis.
GREEN 2 - NW: 1.0	26		12:08		1								X			
GREEN 2 - NW: 1.5	27		12:14		1											
GREEN 2 - NW: 2.0	28		12:18		1											
GREEN 3 - NW: 0.5	29		13:26		1								X			
GREEN 3 - NW: 1.0	30		13:33		1								X			
GREEN 3 - NW: 1.5	31		13:38		1											
GREEN 3 - NW: 2.0	32		13:45		1								◆			
GREEN 3 - S: 0.5	33		13:55		1								X			
GREEN 3 - S: 1.0	34		13:57		1								X			

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Beau Johnson</u>	<u>EPI</u>	<u>4-17-18</u>	<u>1142</u>
Received by: <u>[Signature]</u>	<u>CRISTIAN BALDELOM</u>	<u>Fedex</u>	<u>4/17/18</u>	<u>1142</u>
Relinquished by: <u>[Signature]</u>				
Received by: <u>[Signature]</u>	<u>Nhan Phan</u>	<u>FBI</u>	<u>4/17/18</u>	<u>1250</u>

Report To Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 398-0010 Email beauj@epi-wa.com

SAMPLE CHAIN OF CUSTODY

ME 4/17/18

Page # 5 of 5 ^{BOS}

SAMPLERS (signature) <u>Betsy Ding</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74061</u>
REMARKS	INVOICE TO <u>EPI</u>

TURNAROUND TIME	
<input checked="" type="checkbox"/> Standard Turnaround	
<input type="checkbox"/> RUSH	
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	
<input checked="" type="checkbox"/> Archive Samples	
<input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081				
GREEN 3-S:1.5	35	4/16/18	13:59	soil	1												* Archive all
GREEN 3-S:2.0	36		14:00		1								◆				samples not
GREEN 3-NE:0.5	37		14:15		1								X				marked for
GREEN 3-NE:1.0	38		14:22		1								X				immediate
GREEN 3-NE:1.5	39		14:30		1								◆				analysis.
GREEN 3-NE:2.0	40 38 Env		14:33		1								⊕				⊕ per BS 5/2/16
GREEN 3:0.5	41 31 Env		14:40		1								X				ME
GREEN 3:1.0	42 32 Env		14:43		1								X				
GREEN 3:1.5	43 33 Env		14:52		1												
GREEN 3:2.0	44 34 Env		14:55		1								◆				

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Beau John</u>	<u>EPI</u>	<u>4-17-18</u>	<u>11:42</u>
Received by: <u>[Signature]</u>	<u>CHRISTIAN BALDELOMAN</u>	<u>FEDEX</u>	<u>4/17/18</u>	<u>11:42</u>
Relinquished by:				
Received by: <u>[Signature]</u>	<u>Nhan Phan</u>	<u>FEBSI</u>	<u>4/17/18</u>	<u>12:30</u>

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

May 11, 2018

Beau Johnson, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 804303

Dear Mr Johnson:

Included are the results from the testing of material submitted on April 18, 2018 from the Brookdale 74001, F&BI 804303 project. There are 40 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0511R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 18, 2018 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 804303 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
804303 -01	Green4-S:0.5
804303 -02	Green4-S:1.0
804303 -03	Green4-S:1.5
804303 -04	Green4-S:2.0
804303 -05	Green4-NW:0.5
804303 -06	Green4-NW:1.0
804303 -07	Green4-NW:1.5
804303 -08	Green4-NW:2.0
804303 -09	Green4:0.5
804303 -10	Green4:1.0
804303 -11	Green4:1.5
804303 -12	Green4:2.0
804303 -13	Green4-NE:0.5
804303 -14	Green4-NE:1.0
804303 -15	Green4-NE:1.5
804303 -16	Green4-NE:2.0
804303 -17	Tee3-A:0.5
804303 -18	Tee3-A:1.0
804303 -19	Tee3-A:1.5
804303 -20	Tee3-A:2.0
804303 -21	Tee3-NE:0.5
804303 -22	Tee3-NE:1.0
804303 -23	Tee3-NE:1.5
804303 -24	Tee3-NE:2.0
804303 -25	Tee3-SE:0.5
804303 -26	Tee3-SE:1.0
804303 -27	Tee3-SE:1.5
804303 -28	Tee3-SE:2.0
804303 -29	Tee3-S:0.5
804303 -30	Tee3-S:1.0
804303 -31	Tee3-S:1.5
804303 -32	Tee3-S:2.0
804303 -33	Tee2-A:0.5
804303 -34	Tee2-A:1.0
804303 -35	Tee2-A:1.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (Continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
804303 -36	Tee2-A:2.0
804303 -37	Tee2-W:0.5
804303 -38	Tee2-W:1.0
804303 -39	Tee2-W:1.5
804303 -40	Tee2-W:2.0
804303 -41	Tee2-S:0.5
804303 -42	Tee2-S:1.0
804303 -43	Tee2-S:2.0
804303 -44	Tee2-NE:0.5
804303 -45	Tee2-NE:1.0
804303 -46	Tee2-NE:1.5
804303 -47	Tee2-S:1.5

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green4-S:0.5	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/18/18	Lab ID:	804303-01 1/6
Date Analyzed:	04/19/18	Data File:	041923.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.16

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green4-S:1.0	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/18/18	Lab ID:	804303-02 1/6
Date Analyzed:	04/19/18	Data File:	041924.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.049

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green4-NW:0.5	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/18/18	Lab ID:	804303-05 1/6
Date Analyzed:	04/19/18	Data File:	041925.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.049

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green4-NW:1.0	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/18/18	Lab ID:	804303-06 1/6
Date Analyzed:	04/19/18	Data File:	041926.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.077

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green4-NW:1.5	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/26/18	Lab ID:	804303-07 1/6
Date Analyzed:	04/30/18	Data File:	043020.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.027

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green4:0.5	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/18/18	Lab ID:	804303-09 1/60
Date Analyzed:	04/20/18	Data File:	042053.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83 d	50	150
DBC	89 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	5.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green4:1.0	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/18/18	Lab ID:	804303-10 1/6
Date Analyzed:	04/19/18	Data File:	041928.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green4:1.5	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/26/18	Lab ID:	804303-11 1/6
Date Analyzed:	04/30/18	Data File:	043023.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.058

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green4-NE:0.5	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/25/18	Lab ID:	804303-13 1/6
Date Analyzed:	04/27/18	Data File:	042732.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	96	20	121
DBC	119	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.46

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green4-NE:1.0	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/25/18	Lab ID:	804303-14 1/6
Date Analyzed:	04/27/18	Data File:	042733.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	97	20	121
DBC	111	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.042

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee3-A:0.5	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/25/18	Lab ID:	804303-17 1/6
Date Analyzed:	04/27/18	Data File:	042734.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	94	20	121
DBC	104	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee3-A:1.0	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/25/18	Lab ID:	804303-18 1/6
Date Analyzed:	04/27/18	Data File:	042735.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	97	20	121
DBC	108	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.041

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee3-NE:0.5	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/18/18	Lab ID:	804303-21 1/6
Date Analyzed:	04/19/18	Data File:	041929.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee3-NE:1.0	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/18/18	Lab ID:	804303-22 1/6
Date Analyzed:	04/19/18	Data File:	041915.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee3-SE:0.5	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/18/18	Lab ID:	804303-25 1/6
Date Analyzed:	04/19/18	Data File:	041908.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.037

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee3-SE:1.0	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/18/18	Lab ID:	804303-26 1/6
Date Analyzed:	04/19/18	Data File:	041909.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.29

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee3-SE:2.0	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/26/18	Lab ID:	804303-28 1/6
Date Analyzed:	04/30/18	Data File:	043024.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.026

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee3-S:0.5	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/18/18	Lab ID:	804303-29 1/6
Date Analyzed:	04/19/18	Data File:	041910.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.40

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee3-S:1.0	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/18/18	Lab ID:	804303-30 1/6
Date Analyzed:	04/19/18	Data File:	041911.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.072

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee3-S:1.5	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/26/18	Lab ID:	804303-31 1/6
Date Analyzed:	04/30/18	Data File:	043025.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	73	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee2-A:0.5	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/18/18	Lab ID:	804303-33 1/60
Date Analyzed:	04/20/18	Data File:	042054.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83 d	50	150
DBC	89 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	2.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee2-A:1.0	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/18/18	Lab ID:	804303-34 1/6
Date Analyzed:	04/19/18	Data File:	041913.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee2-A:2.0	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/26/18	Lab ID:	804303-36 1/6
Date Analyzed:	04/30/18	Data File:	043026.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.42

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee2-W:0.5	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/18/18	Lab ID:	804303-37 1/6
Date Analyzed:	04/19/18	Data File:	041930.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.086

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee2-W:1.0	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/18/18	Lab ID:	804303-38 1/6
Date Analyzed:	04/19/18	Data File:	041931.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.016

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee2-S:0.5	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/18/18	Lab ID:	804303-41 1/6
Date Analyzed:	04/19/18	Data File:	041936.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.015

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee2-S:1.0	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/18/18	Lab ID:	804303-42 1/6
Date Analyzed:	04/19/18	Data File:	041937.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.033

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee2-NE:0.5	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/18/18	Lab ID:	804303-44 1/6
Date Analyzed:	04/19/18	Data File:	041938.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.17

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee2-NE:1.0	Client:	Environmental Partners
Date Received:	04/18/18	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/18/18	Lab ID:	804303-45 1/6
Date Analyzed:	04/19/18	Data File:	041939.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/18/18	Lab ID:	08-827 mb2 1/6
Date Analyzed:	04/19/18	Data File:	041922.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	88	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/18/18	Lab ID:	08-831 mb 1/6
Date Analyzed:	04/19/18	Data File:	041907.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/24/18	Lab ID:	08-887 mb 1/6
Date Analyzed:	04/25/18	Data File:	042525.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 804303
Date Extracted:	04/26/18	Lab ID:	08-918 mb 1/6
Date Analyzed:	04/30/18	Data File:	043019.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	95	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/11/18

Date Received: 04/18/18

Project: Brookdale 74001, F&BI 804303

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804303-22 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	87	82	50-150	6

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	91	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/11/18

Date Received: 04/18/18

Project: Brookdale 74001, F&BI 804303

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804290-21 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	3.9 ve	0 b	0 b	50-150	nm

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	97	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/11/18

Date Received: 04/18/18

Project: Brookdale 74001, F&BI 804303

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	91	93	70-130	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/11/18

Date Received: 04/18/18

Project: Brookdale 74001, F&BI 804303

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804303-07 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.027	79 b	70 b	50-150	12 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	91	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

Report # 804303
 Name Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0000 Email beau.j@epi-wa.com

SAMPLERS (signature) Betsy Wing

PROJECT NAME Brookdale

REMARKS XDieldson only per BT, ML 4/18/18

ME 04-18-18 Page # 1 of 6805

TURNAROUND TIME

☒ Standard Turnaround
☐ RUSH
 Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081				Notes
GREEN 4-5:0.5	01	4/17/18	8:09	Soil	1								X				Archive all samples not marked for immediate analysis.
GREEN 4-5:1.0	02		8:12		1								X				
GREEN 4-5:1.5	03		8:16		1												
GREEN 4-5:2.0	04		8:26		1												
GREEN 4-NW:0.5	05		8:24		1								X				
GREEN 4-NW:1.0	06		8:27		1								X				
GREEN 4-NW:1.5	07		8:33		1								◇				
GREEN 4-NW:2.0	08		8:37		1												
GREEN 4:0.5	09		8:42		1								X				Samples received at 4 °C
GREEN 4:1.0	10		8:44		1								X				

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Ken John</u>	<u>EPI</u>	<u>4-18-18</u>	<u>0730</u>
Received by: <u>[Signature]</u>	<u>Tanya Biora</u>	<u>EPI</u>	<u>4/18</u>	<u>0730</u>
Relinquished by: _____	_____	_____	_____	_____
Received by: _____	_____	_____	_____	_____

SAMPLE CHAIN OF CUSTODY

804303
 Report to Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature) Beau Johnson

PROJECT NAME

Brookdale

REMARKS

ME 04-18-18

Page # 1 of 6 B05

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other _____

PO #

74001

INVOICE TO

EPI

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HClD	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8051				
GREEN 4:1.5	11	4/17/18	8:49	Soil	1								◇				4 Archive all samples not marked for immediate analysis
GREEN 4:2.0	12		8:57		1												
GREEN 4-NE:0.5	13		9:06		1								◆				
GREEN 4-NE:1.0	14		9:10		1								◆				◆ per BT
GREEN 4-NE:1.5	15		9:21		1												4/25/18 ME
GREEN 4-NE:2.0	16		9:25		1												◇ per BT
TEE 3-A:0.5	17		9:47		1								◆				4/25/18 ME
TEE 3-A:1.0	18		9:50		1								◆				
TEE 3-A:1.5	19		9:59		1												
TEE 3-A:2.0	20		10:02		1												

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE		PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	<u>[Signature]</u>	<u>Beau Johnson</u>	<u>EPI</u>	<u>4-18-18</u>	<u>0730</u>
Received by:	<u>[Signature]</u>	<u>JAMES BRUYA</u>	<u>F&B</u>	<u>4/18</u>	<u>0730</u>
Relinquished by:					
Received by:					

804303

SAMPLE CHAIN OF CUSTODY

ME 04-18-18 Page # 3 of 6 805

Report to Beau JohnsonCompany EP1Address 1180 NW Maple St, Suite 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EP1

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8250C	SVOCs by 8270D	PAHs 8270D SIM	pesticides			
TEE 3-B: 0.5			10:10													
TEE 3-B: 1.0			10:13													
TEE 3-B: 1.5			10:22													
TEE 3-B: 2.0			10:26													
TEE 3-NE: 0.5	21	4/17/18	10:38	Soil	1								X			Dispose of these samples 4/18 Disposed EWB * Archive all samples not marked for immediate analysis.
TEE 3-NE: 1.0	22		10:45		1								X			
TEE 3-NE: 1.5	23		10:54		1											
TEE 3-NE: 2.0	24		10:58		1											
TEE 3-SE: 0.5	25		11:04		1								X			
TEE 3-SE: 1.0	26		11:10		1								X			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Beau Johnson	EP1	4-18-18	0730
Received by:	James Bruya	F&B	4-18	0730
Relinquished by:				
Received by:				

SAMPLE CHAIN OF CUSTODY

Report To Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0014 Email beauj@epi-wa.com

SAMPLERS (signature)

Beau Johnson

PROJECT NAME

ME 04-18-18

Page # 4 of 6 B05

PO #

74001

REMARKS

INVOICE TO

EPI

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other

						ANALYSES REQUESTED												
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081				Notes	
TEE 3 - SE: 1.5	27	04/17/18	11:44	Soil	1												* Archive all samples not marked for immediately	
TEE 3 - SE: 2.0	28	↓	11:50	↓	1								◇					
TEE 3 - S: 0.5	29		12:05	1									X					
TEE 3 - S: 1.0	30		12:06	1									X					
TEE 3 - S: 1.5	31		12:08	1									◇					
TEE 3 - S: 2.0	32		↓	12:10	↓	1												
						63												
						4-18-18												

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Beau Johnson</u>	Beau Johnson	EPI	4-18-18	0730
Received by: <u>James Bruya</u>	JAMES BRUYA	F&B	4-18-18	0730
Relinquished by:				
Received by:				

SAMPLE CHAIN OF CUSTODY

Report To Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature) Beau Johnson

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPI

ME 04-18-18 5 of 6805
 TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8061				
Tee 2-A: 0.5	33	4/17/18	1314	Soil	1								X				* Archive all samples not marked for immediate analysis.
Tee 2-A: 1.0	34		1321		1								X				
Tee 2-A: 1.5	35		1344		1												
Tee 2-A: 2.0	36		1346		1								◇				
Tee 2-W: 0.5	37		1359		1								X				
Tee 2-W: 1.0	38		1403		1								X				
Tee 2-W: 1.5	39		1408		1												
Tee 2-W: 2.0	40		1410		1												
Tee 2-S: 0.5	41		1420		1								X				
Tee 2-S: 1.0	42	↓	1427	↓	1								X				

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Don Johnson</u>	<u>EPI</u>	<u>4-18-18</u>	<u>0730</u>
Received by: <u>[Signature]</u>	<u>JAMES BIOYE</u>	<u>EPI</u>	<u>4/18</u>	<u>0730</u>
Relinquished by:				
Received by:				

SAMPLE CHAIN OF CUSTODY

Report To 804303 Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email beauj@epiwa.com

SAMPLERS (signature) [Signature]

PROJECT NAME

Brookdale

ME 04-18-18 Page # 6 of 6 B05

PO #

74001

REMARKS

INVOICE TO

EPI

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081				
Tee2-S: 2.0	43	4/17/18	1441	soil	1												* Archive all samples not mailed for immediate analysis.
Tee2-NE: 0.5	44	↓	1449	↓	1								X				
Tee2-NE: 1.0	45	↓	1518	↓	1								X				
Tee2-NE: 1.5	46	↓	1539	↓	1												
Tee2-S: 1.5	47	4/17	1427	soil	1												
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Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Ben Johnson</u>	<u>EPI</u>	<u>4-18-18</u>	<u>0730</u>
Received by: <u>[Signature]</u>	<u>James Bruya</u>	<u>EPI</u>	<u>4/18</u>	<u>730</u>
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

May 14, 2018

Beau Johnson, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 74001, F&BI 804344

Dear Mr Johnson:

Included are the results from the testing of material submitted on April 19, 2018 from the 74001, F&BI 804344 project. There are 43 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0514R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 19, 2018 by Friedman & Bruya, Inc. from the Environmental Partners 74001, F&BI 804344 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
804344-01	Tee 4-N:0.5
804344-02	Tee 4-N:1.0
804344-03	Tee 4-N:1.5
804344-04	Tee 4-N:2.0
804344-05	Tee 4-NW:0.5
804344-06	Tee 4-NW:1.0
804344-07	Tee 4-NW:1.5
804344-08	Tee 4-NW:2.0
804344-09	Tee 4-D:0.5
804344-10	Tee 4-D:1.0
804344-11	Tee 4-D:1.5
804344-12	Tee 4-D:2.0
804344-13	Tee 4-A:0.5
804344-14	Tee 4-A:1.0
804344-15	Tee 4-A:1.5
804344-16	Tee 4-A:2.0
804344-17	Tee 5-NE:0.5
804344-18	Tee 5-NE:1.0
804344-19	Tee 5-NE:1.5
804344-20	Tee 5-NE:2.0
804344-21	Tee 5-A:0.5
804344-22	Tee 5-A:1.0
804344-23	Tee 5-A:1.5
804344-24	Tee 5-A:2.0
804344-25	Tee 5-S:0.5
804344-26	Tee 5-S:1.0
804344-27	Tee 5-S:1.5
804344-28	Tee 5-S:2.0
804344-29	Tee 5-NW:0.5
804344-30	Tee 5-NW:1.0
804344-31	Tee 7-C:0.5
804344-32	Tee 7-C:1.0
804344-33	Tee 7-C:1.5
804344-34	Tee 7-C:2.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (Continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
804344-35	Tee 7-NW:0.5
804344-36	Tee 7-NW:1.0
804344-37	Tee 7-NW:1.5
804344-38	Tee 7-NW:2.0
804344-39	Tee 5-NW:1.5
804344-40	Tee 5-NW:2.0
804344-41	Tee 7-A:0.5
804344-42	Tee 7-A:1.0
804344-43	Tee 7-A:1.5
804344-44	Tee 7-A:2.0
804344-45	Tee 7-B:0.5
804344-46	Tee 7-B:1.0
804344-47	Tee 7-B:1.5
804344-48	Tee 7-B:2.0
804344-49	Tee 7-S:0.5
804344-50	Tee 7-S:1.0
804344-51	Tee 7-S:1.5
804344-52	Tee 7-S:2.0
804344-53	Tee 7-NE:0.5
804344-54	Tee 7-NE:1.0
804344-55	Tee 7-NE:1.5
804344-56	Tee 7-NE:2.0

The 8081B analysis for samples Tee 4-N:2.0 and Tee 4-D:2.0 was requested outside of the holding time. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 4-N:0.5	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/30/18	Lab ID:	804344-01 1/6
Date Analyzed:	05/01/18	Data File:	050128.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.34

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 4-N:1.0	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/30/18	Lab ID:	804344-02 1/6
Date Analyzed:	05/01/18	Data File:	050129.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.22

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 4-N:2.0 ht	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	05/08/18	Lab ID:	804344-04 1/6
Date Analyzed:	05/09/18	Data File:	050909.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	92	50	150
DBC	111	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.028

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 4-NW:0.5	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/30/18	Lab ID:	804344-05 1/6
Date Analyzed:	05/01/18	Data File:	050130.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.058

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 4-NW:1.0	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/30/18	Lab ID:	804344-06 1/6
Date Analyzed:	05/01/18	Data File:	050131.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 4-D:0.5	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/30/18	Lab ID:	804344-09 1/60
Date Analyzed:	05/03/18	Data File:	050310.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	89 d	50	150
DBC	176 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	5.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 4-D:1.0	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/30/18	Lab ID:	804344-10 1/6
Date Analyzed:	05/01/18	Data File:	050133.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.52

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 4-D:2.0 ht	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	05/08/18	Lab ID:	804344-12 1/6
Date Analyzed:	05/09/18	Data File:	050910.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	88	50	150
DBC	108	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 4-A:0.5	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/30/18	Lab ID:	804344-13 1/6
Date Analyzed:	05/01/18	Data File:	050134.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 4-A:1.0	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/30/18	Lab ID:	804344-14 1/6
Date Analyzed:	05/01/18	Data File:	050135.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.032

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 4-A:2.0	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/30/18	Lab ID:	804344-16 1/6
Date Analyzed:	05/01/18	Data File:	050136.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.26

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 5-NE:0.5	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/19/18	Lab ID:	804344-17 1/6
Date Analyzed:	04/20/18	Data File:	042021.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.028

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 5-NE:1.0	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/19/18	Lab ID:	804344-18 1/6
Date Analyzed:	04/20/18	Data File:	042024.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 5-A:0.5	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/19/18	Lab ID:	804344-21 1/6
Date Analyzed:	04/20/18	Data File:	042025.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 5-A:1.0	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/19/18	Lab ID:	804344-22 1/6
Date Analyzed:	04/20/18	Data File:	042026.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.24

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 5-A:2.0	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/30/18	Lab ID:	804344-24 1/6
Date Analyzed:	05/01/18	Data File:	050137.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.14

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 5-S:0.5	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/19/18	Lab ID:	804344-25 1/6
Date Analyzed:	04/20/18	Data File:	042027.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 5-S:1.0	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/19/18	Lab ID:	804344-26 1/60
Date Analyzed:	04/23/18	Data File:	042337.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81 d	50	150
DBC	81 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 5-S:2.0	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/30/18	Lab ID:	804344-28 1/6
Date Analyzed:	05/01/18	Data File:	050138.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.010

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 5-NW:0.5	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/19/18	Lab ID:	804344-29 1/6
Date Analyzed:	04/20/18	Data File:	042029.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 5-NW:1.0	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/19/18	Lab ID:	804344-30 1/6
Date Analyzed:	04/20/18	Data File:	042030.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.012

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 7-C:0.5	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/19/18	Lab ID:	804344-31 1/6
Date Analyzed:	04/20/18	Data File:	042034.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 7-C:1.0	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/19/18	Lab ID:	804344-32 1/6
Date Analyzed:	04/20/18	Data File:	042035.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 7-NW:0.5	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/19/18	Lab ID:	804344-35 1/6
Date Analyzed:	04/20/18	Data File:	042036.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 7-NW:1.0	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/19/18	Lab ID:	804344-36 1/6
Date Analyzed:	04/20/18	Data File:	042037.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.039

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 7-A:0.5	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/19/18	Lab ID:	804344-41 1/6
Date Analyzed:	04/20/18	Data File:	042038.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 7-A:1.0	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/19/18	Lab ID:	804344-42 1/6
Date Analyzed:	04/20/18	Data File:	042039.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 7-B:0.5	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/19/18	Lab ID:	804344-45 1/6
Date Analyzed:	04/20/18	Data File:	042040.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 7-B:1.0	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/19/18	Lab ID:	804344-46 1/6
Date Analyzed:	04/20/18	Data File:	042041.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.096

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 7-B:1.5	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/30/18	Lab ID:	804344-47 1/6
Date Analyzed:	05/01/18	Data File:	050139.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 7-S:0.5	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/19/18	Lab ID:	804344-49 1/6
Date Analyzed:	04/20/18	Data File:	042042.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.046

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 7-S:1.0	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/19/18	Lab ID:	804344-50 1/6
Date Analyzed:	04/20/18	Data File:	042043.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 7-NE:0.5	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/19/18	Lab ID:	804344-53 1/6
Date Analyzed:	04/20/18	Data File:	042044.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 7-NE:1.0	Client:	Environmental Partners
Date Received:	04/19/18	Project:	74001, F&BI 804344
Date Extracted:	04/19/18	Lab ID:	804344-54 1/6
Date Analyzed:	04/20/18	Data File:	042045.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 804344
Date Extracted:	04/30/18	Lab ID:	08-950 mb 1/6
Date Analyzed:	05/01/18	Data File:	050106.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	91	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 804344
Date Extracted:	04/19/18	Lab ID:	08-857 mb 1/6
Date Analyzed:	04/20/18	Data File:	042020.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	89	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 804344
Date Extracted:	05/08/18	Lab ID:	08-988 mb 1/6
Date Analyzed:	05/09/18	Data File:	050906.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	98	50	150
DBC	114	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/14/18

Date Received: 04/19/18

Project: 74001, F&BI 804344

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804344-17 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.028	71 b	69 b	50-150	3 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	93	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/14/18

Date Received: 04/19/18

Project: 74001, F&BI 804344

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804371-08 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	93	89	50-150	4

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	96	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/14/18

Date Received: 04/19/18

Project: 74001, F&BI 804344

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 805107-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	3.7	181 b	102 b	50-150	56 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	98	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

804344

SAMPLE CHAIN OF CUSTODY

ME 04-18-18

Page # 1 of 6

Report to Beau JohnsonCompany EPIAddress 1180 NW Maple St, Suite 30City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature)

Betty Wing

PROJECT NAME

Brookdale

PO #

74001

REMARKS

* Dieldrin only
per BT
ML4/19/18

INVOICE TO

EPI

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081			
Tee 4-N: 0.5	01	4/18/18	0818	Soil	1								◆			* Archive all samples not marked for immediate analysis.
Tee 4-N: 1.0	02		0826		1								◆			
Tee 4-N: 1.5	03		0841		1											
Tee 4-N: 2.0	04		0845		1								◆			◆ - per BT 4/27/18
Tee 4-NW: 0.5	05		0853		1								◆			ME
Tee 4-NW: 1.0	06		0901		1								◆			◆ per BT
Tee 4-NW: 1.5	07		0913		1											5/7/18 ME
Tee 4-NW: 2.0	08		0920		1											
Tee 4-D: 0.5	09		0929		1								◆			Samples received at 4 °C
Tee 4-D: 1.0	10		0930		1								◆			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Beau Johnson</u>	<u>EPI</u>	<u>4-18-18</u>	<u>11:40am</u>
Received by: <u>[Signature]</u>	<u>Brad Rantz</u>	<u>FedEx SDC</u>	<u>4/19/18</u>	<u>11:40a</u>
Relinquished by:				
Received by: <u>[Signature]</u>	<u>Nhan Phan</u>	<u>FeBI</u>	<u>4/19/18</u>	<u>1235</u>

SAMPLE CHAIN OF CUSTODY

Report # 804344
 Repor to Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature) Beau Johnson

PROJECT NAME Brookdale

REMARKS

ME 04-19-18

age # 2 of 6

PO #

74001

INVOICE TO

EPI

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081			
Tee 4-D: 1.5	11	4/18/18	0933	soil	1											# Archive all samples not
Tee 4-D: 2.0	12		0935		1											marked for
Tee 4-A: 0.5	13		0942		1											immediate
Tee 4-A: 1.0	14		1013		1											analysis.
Tee 4-A: 1.5	15		1023		1											
Tee 4-A: 2.0	16		1030		1											
Tee 5-NE: 0.5	17		1154		1											
Tee 5-NE: 1.0	18		1158		1											
Tee 5-NE: 1.5	19		1201		1											
Tee 5-NE: 2.0	20		1206		1											

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Beau Johnson</u>	<u>Beau Johnson</u>	<u>EPI</u>	<u>4-19-18</u>	<u>11:40</u>
Received by: <u>Brad Korte</u>	<u>Brad Korte</u>	<u>FedEx SDC</u>	<u>4/19/18</u>	<u>11:40</u>
Relinquished by:				
Received by: <u>Nhan Phan</u>	<u>Nhan Phan</u>	<u>FBI</u>	<u>4/19/18</u>	<u>12:55</u>

SAMPLE CHAIN OF CUSTODY

Report # 804344
 Beau Johnson
 Company EP1
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature)

Blissy Wing

PROJECT NAME

Brookdale

ME 04-19-18

3804

Page # of 4

TURNAROUND TIME

☒ Standard Turnaround
☐ RUSH
 Rush charges authorized by:

REMARKS

INVOICE TO

EP1

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	pesticides 18081				
TeeS-A: 0.5	21	4/18/18	1211	Soil	1								X				# Archive all samples not marked for immediate analysis.
TeeS-A: 1.0	22		1213		1								X				
TeeS-A: 1.5	23		1217		1												
TeeS-A: 2.0	24		1222		1								◆				
TeeS-S: 0.5	25		1233		1								X				
TeeS-S: 1.0	26		1235		1								X				
TeeS-S: 1.5	27		1240		1												
TeeS-S: 2.0	28		1242		1								◆				
TeeS-NW: 0.5	29		1253		1								X				
TeeS-NW: 1.0	30	↓	1307	↓	1								X				

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Beau Johnson</u>	<u>EP1</u>	<u>4-19-18</u>	<u>1140am</u>
Received by: <u>[Signature]</u>	<u>Brad Rente</u>	<u>FedEx SDC</u>	<u>4/19/18</u>	<u>1124am</u>
Relinquished by: <u>[Signature]</u>				
Received by: <u>[Signature]</u>	<u>Nhan Phan</u>	<u>FBI</u>	<u>4/19/18</u>	<u>1235</u>

SAMPLE CHAIN OF CUSTODY

Report 804344
Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature) Betsy Wing

PROJECT NAME

Brookdale

REMARKS

ME 04-19-18

PO #

74001

INVOICE TO

EPI

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081				
Tec 7-C: 0.5	31	4/18/18	1411	Soil	1								X				# Archive all samples not marked for immediate analysis.
Tec 7-C: 1.0	32		1414		1								X				
Tec 7-C: 1.5	33		1417		1												
Tec 7-C: 2.0	34		1419		1												
Tec 7-NW: 0.5	35		1348		1								X				
Tec 7-NW: 1.0	36		1352		1								X				
Tec 7-NW: 1.5	37		1354		1												
Tec 7-NW: 2.0	38	✓	1358	✓	1												
					63	4-19-18											

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Beau Johnson</u>	<u>EPI</u>	<u>4-19-18</u>	<u>11:40am</u>
Received by: <u>[Signature]</u>	<u>Brad Reitz</u>	<u>FedEx SDC</u>	<u>4/19/18</u>	<u>11:40am</u>
Relinquished by: <u>[Signature]</u>				
Received by: <u>[Signature]</u>	<u>Nhan Phan</u>	<u>FBI</u>	<u>4/19/18</u>	<u>1235</u>

SAMPLE CHAIN OF CUSTODY

Report To 804344 Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature)

Betsy Wing

PROJECT NAME

Brookdale

PO #

74061

REMARKS

INVOICE TO

EPI

ME 04-19-18 9 804 6

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081				
Tee5-NW:1.5	39	4/18/18	1322	Soil	1												# Archive all samples not marked for immediate analysis.
Tee5-NW:2.0	40		1324		1												
Tee5 Tee7-A:0.5	41		1448		1								X				
Tee7A:1.0	42		1451		1								X				
Tee7-A:1.5	43		1527		1												
Tee7-A:2.0	44		1535		1												
Tee7-B:0.5	45		1428		1								X				
Tee7-B:1.0	46		1434		1								X				
Tee7-B:1.5	47		1439		1												
Tee7-B:2.0	48		1444		1												

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Ben Sherr</u>	<u>EPI</u>	<u>4-19-18</u>	<u>11:40am</u>
Received by: <u>[Signature]</u>	<u>Brad Reitz</u>	<u>FedEx SDC</u>	<u>4/19/18</u>	<u>11:40am</u>
Relinquished by: <u>[Signature]</u>				
Received by: <u>[Signature]</u>	<u>Nhan Phan</u>	<u>F&BT</u>	<u>4/19/18</u>	<u>12:35</u>

Report To BEAN JOHNSON
 Company EPI
 Address 1180 NW MAPLE ST. SUITE 310
 City, State, ZIP ISSAQUAH, WA. 98027
 Phone (425) 395-0000 Email _____

SAMPLE CHAIN OF CUSTODY

ME 04-19-18

Page # 6 of 6

SAMPLERS (signature)

PROJECT NAME

BROOKDALE

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☐ Archive Samples

☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	PESTICIDES 8081			
TEE 7-S:0.5	49	04/18/18	15:45	SOIL	1								X			
TEE 7-S:1.0	50		15:50										X			
TEE 7-S:1.5	51		15:55										X	hold		
TEE 7-S:2.0	52		16:00										X	hold		
TEE 7-NE:0.5	53		16:06										X			
TEE 7-NE:1.0	54		16:09										X			
TEE 7-NE:1.5	55		16:11										X	hold		
TEE 7-NE:2.0	56		16:20										X	hold		
03 4-19-18																

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Bar Johnson</u>	<u>EPI</u>	<u>4-19-18</u>	<u>11:40am</u>
Received by: <u>[Signature]</u>	<u>Brad Reitz</u>	<u>Fredex SDC</u>	<u>4/19/18</u>	<u>11:40am</u>
Relinquished by:				
Received by: <u>[Signature]</u>	<u>Whan Pham</u>	<u>FEBI</u>	<u>4/19/18</u>	<u>12:35</u>

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
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May 11, 2018

Beau Johnson, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 804371

Dear Mr Johnson:

Included are the results from the testing of material submitted on April 20, 2018 from the Brookdale 74001, F&BI 804371 project. There are 45 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0511R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 20, 2018 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 804371 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
804371-01	Tee8-A:0.5
804371-02	Tee8-A:1.0
804371-03	Tee8-A:1.5
804371-04	Tee8-A:2.0
804371-05	Tee8-B:0.5
804371-06	Tee8-B:1.0
804371-07	Tee8-B:1.5
804371-08	Tee8-B:2.0
804371-09	Tee8-NE:0.5
804371-10	Tee8-NE:1.0
804371-11	Tee8-NE:1.5
804371-12	Tee8-NE:2.0
804371-13	Tee8-W:0.5
804371-14	Tee8-W:1.0
804371-15	Tee8-W:1.5
804371-16	Tee8-W:2.0
804371-17	Tee8-SE:0.5
804371-18	Tee8-SE:1.0
804371-19	Tee8-SE:1.5
804371-20	Tee8-SE:2.0
804371-21	Tee9-W:0.5
804371-22	Tee9-W:1.0
804371-23	Tee9-W:1.5
804371-24	Tee9-W:2.0
804371-25	Tee9-S:0.5
804371-26	Tee9-S:1.0
804371-27	Tee9-S:1.5
804371-28	Tee9-S:2.0
804371-29	Tee9-N:0.5
804371-30	Tee9-N:1.0
804371-31	Tee9-N:1.5
804371-32	Tee9-N:2.0
804371-33	Tee9-E:0.5
804371-34	Tee9-E:1.0
804371-35	Tee9-E:1.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (Continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
804371-36	Tee9-E:2.0
804371-37	Tee9-B:0.5
804371-38	Tee9-B:1.0
804371-39	Tee9-B:1.5
804371-40	Tee9-B:2.0
804371-41	Tee9-C:0.5
804371-42	Tee9-C:1.0
804371-43	Tee9-C:1.5
804371-44	Tee9-C:2.0
804371-45	Tee9-A:0.5
804371-46	Tee9-A:1.0
804371-47	Tee9-A:1.5
804371-48	Tee9-A:2.0
804371-49	Tee14-S:0.5
804371-50	Tee14-S:1.0
804371-51	Tee14-S:1.5
804371-52	Tee14-S:2.0
804371-53	Tee14-E:0.5
804371-54	Tee14-E:1.0
804371-55	Tee14-E:1.5
804371-56	Tee14-E:2.0
804371-57	Tee14-N:0.5
804371-58	Tee14-N:1.0
804371-59	Tee14-N:1.5
804371-60	Tee14-N:2.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee8-A:0.5	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-01 1/6
Date Analyzed:	04/23/18	Data File:	042311.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee8-A:1.0	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-02 1/6
Date Analyzed:	04/23/18	Data File:	042314.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee8-B:0.5	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-05 1/120
Date Analyzed:	04/24/18	Data File:	042418.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82 d	50	150
DBC	79 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	9.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee8-B:1.0	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-06 1/6
Date Analyzed:	04/23/18	Data File:	042316.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.18

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee8-B:2.0	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/30/18	Lab ID:	804371-08 1/6
Date Analyzed:	05/01/18	Data File:	050119.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee8-NE:0.5	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-09 1/6
Date Analyzed:	04/23/18	Data File:	042317.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee8-NE:1.0	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-10 1/6
Date Analyzed:	04/23/18	Data File:	042318.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee8-W:0.5	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-13 1/60
Date Analyzed:	04/24/18	Data File:	042419.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	91 d	50	150
DBC	93 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee8-W:1.0	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-14 1/6
Date Analyzed:	04/23/18	Data File:	042320.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.75

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee8-W:2.0	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/30/18	Lab ID:	804371-16 1/6
Date Analyzed:	05/01/18	Data File:	050117.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.095

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee8-SE:0.5	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-17 1/6
Date Analyzed:	04/23/18	Data File:	042324.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.040

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee8-SE:1.0	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-18 1/6
Date Analyzed:	04/23/18	Data File:	042325.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.019

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee9-W:0.5	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-21 1/6
Date Analyzed:	04/23/18	Data File:	042326.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.013

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee9-W:1.0	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-22 1/6
Date Analyzed:	04/23/18	Data File:	042327.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.037

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee9-S:0.5	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-25 1/6
Date Analyzed:	04/23/18	Data File:	042328.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.022

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee9-S:1.0	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-26 1/6
Date Analyzed:	04/23/18	Data File:	042329.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee9-N:0.5	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-29 1/6
Date Analyzed:	04/23/18	Data File:	042330.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.13

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee9-N:1.0	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-30 1/6
Date Analyzed:	04/23/18	Data File:	042331.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.020

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee9-E:0.5	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-33 1/6
Date Analyzed:	04/23/18	Data File:	042332.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.23

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee9-E:1.0	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-34 1/6
Date Analyzed:	04/23/18	Data File:	042333.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.080

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee9-E:1.5	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/30/18	Lab ID:	804371-35 1/6
Date Analyzed:	05/01/18	Data File:	050118.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.018

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee9-B:0.5	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-37 1/6
Date Analyzed:	04/23/18	Data File:	042334.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.70

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee9-B:1.0	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-38 1/6
Date Analyzed:	04/23/18	Data File:	042335.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.16

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee9-B:2.0	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/30/18	Lab ID:	804371-40 1/6
Date Analyzed:	05/01/18	Data File:	050125.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee9-C:0.5	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-41 1/6
Date Analyzed:	04/24/18	Data File:	042429.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.17

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee9-C:1.0	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-42 1/6
Date Analyzed:	04/24/18	Data File:	042420.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.88

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee9-C:2.0	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/30/18	Lab ID:	804371-44 1/6
Date Analyzed:	05/01/18	Data File:	050126.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.087

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee9-A:0.5	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-45 1/6
Date Analyzed:	04/24/18	Data File:	042421.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee9-A:1.0	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-46 1/6
Date Analyzed:	04/24/18	Data File:	042422.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee14-S:0.5	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-49 1/6
Date Analyzed:	04/24/18	Data File:	042423.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.024

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee14-S:1.0	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-50 1/6
Date Analyzed:	04/24/18	Data File:	042424.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.019

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee14-E:0.5	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-53 1/6
Date Analyzed:	04/24/18	Data File:	042425.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.086

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee14-E:1.0	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-54 1/6
Date Analyzed:	04/24/18	Data File:	042426.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.013

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee14-N:0.5	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-57 1/60
Date Analyzed:	04/25/18	Data File:	042535.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82 d	50	150
DBC	81 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee14-N:1.0	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	804371-58 1/6
Date Analyzed:	04/24/18	Data File:	042434.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	20	121
DBC	85	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.21

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee14-N:2.0	Client:	Environmental Partners
Date Received:	04/20/18	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/30/18	Lab ID:	804371-60 1/6
Date Analyzed:	05/01/18	Data File:	050127.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.30

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/30/18	Lab ID:	08-950 mb 1/6
Date Analyzed:	05/01/18	Data File:	050106.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	91	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	08-875 mb 1/6
Date Analyzed:	04/23/18	Data File:	042310.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	89	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 804371
Date Extracted:	04/23/18	Lab ID:	08-876 mb 1/6
Date Analyzed:	04/24/18	Data File:	042417.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/11/18

Date Received: 04/20/18

Project: Brookdale 74001, F&BI 804371

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804371-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	84	73	50-150	14

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	88	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/11/18

Date Received: 04/20/18

Project: Brookdale 74001, F&BI 804371

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804371-41 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.17	102 b	113 b	50-150	10 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	89	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/11/18

Date Received: 04/20/18

Project: Brookdale 74001, F&BI 804371

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804371-08 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	93	89	50-150	4

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	96	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

Report To 804371
Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0016 Email beauj@epi-wa.com

SAMPLERS (signature)

Betsy Wing

PROJECT NAME

Brookdale

PO #

74001

REMARKS

*Diels only
per BT ML 4/20/18

INVOICE TO

EPI

ME 04-20-18

805 7

Page # 1 of 7

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED												Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081					
Tee 8-A:0.5	01	4/19/18	0807	Soil	1								X					* - per BT 4/27/18 ME
Tee 8-A:1.0	02		0812		1								X					Archive all samples not marked for immediate analysis
Tee 8-A:1.5	03		0818		1													
Tee 8-A:2.0	04		0826		1													
Tee 8-B:0.5	05		0832		1								X					
Tee 8-B:1.0	06		0836		1								X					
Tee 8-B:1.5	07		0838		1													
Tee 8-B:2.0	08		0841		1													
Tee 8-NE:0.5	09		0905		1								X					Samples received at 5 °C
Tee 8-NE:1.0	10		0908		1								X					

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by:	<u>[Signature]</u>		<u>Beau Johnson</u>		<u>EPI</u>	<u>4-20-18</u>	<u>12:52</u>
Received by:	<u>[Signature]</u>		<u>Wes Hering</u>		<u>F&B</u>	<u>4-20-18</u>	<u>12:52P</u>
Relinquished by:	<u>[Signature]</u>		<u>Elizabeth Webber-Bry</u>		<u>F&B</u>	<u>4/20/18</u>	<u>13:45</u>
Received by:							

804371

SAMPLE CHAIN OF CUSTODY

ME 04-20-18

805 7

Report To Beau Johnson

Company EPI

Address 1180 NW Maple St, Suite 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081			
Tee8-NE: 1.5	11	4/19/18	0917	soil	1											*Archive all samples not marked for immediate analysis
Tee8-NE: 2.0	12		0921		1											
Tee8-W: 0.5	13		0849		1								X			
Tee8-W: 1.0	14		0850		1								X			
Tee8-W: 1.5	15		0854		1											
Tee8-W: 2.0	16		0857		1								◆			
Tee8-SE: 0.5	17		0928		1								X			
Tee8-SE: 1.0	18		0930		1								X			
Tee8-SE: 1.5	19		0936		1											
Tee8-SE: 2.0	20	✓	0940	✓	1											

Friedman & Bruya, Inc.

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Seattle, WA 98119-2029

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SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Beau Johnson	EPI	4-20-18	12:52
Received by:	Wes Herring	F&B	4-20-18	12:52 PM
Relinquished by:	Elizabeth Wulfer-Bruya	F&B	4/20/18	13:45
Received by:				

804371

SAMPLE CHAIN OF CUSTODY

ME 04-20-18 BOS 7
Page 3 of 7Report To Beau JohnsonCompany EPIAddress 1180 NW Maple St, Suite 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature)

Betsy Wong

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPI

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other _____

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081				
Tee 9-W: 0.5	21	4/19/18	1050	soil	1								X				All samples not marked for immediate analysis to be archived.
Tee 9-W: 1.0	22		1102		1								X				
Tee 9-W: 1.5	23		1132		1												
Tee 9-W: 2.0	24		1144		1												
Tee 9-B: 0.5					1								X				
Tee 9-B: 1.0					1								X				
Tee 9-B: 1.5					1												
Tee 9-B: 2.0					1												
Tee 9-A: 0.5					1								X				
Tee 9-A: 1.0					1								X				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Beau Johnson</u>	<u>EPI</u>	<u>4-20-18</u>	<u>12:52</u>
Received by: <u>[Signature]</u>	<u>WES Herring</u>	<u>F&B</u>	<u>4-20-18</u>	<u>12:52pm</u>
Relinquished by: <u>[Signature]</u>	<u>Elizabeth Webber-Bruya</u>	<u>F&B</u>	<u>4/20/18</u>	<u>1345</u>
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804371

SAMPLE CHAIN OF CUSTODY

Report To Beau JohnsonCompany EPIAddress 1180 NW Maple St, Suite 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email beauj@epi-va.com

SAMPLERS (signature)

Betsy King

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPIME 04-20-18 4 BOS 7
Page 4 of 7

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081			
Tee9-S: 0.5	25	4/19/18	0957	soil	1								X			* Archive all samples not marked for immediate analysis.
Tee9-S: 1.0	26		1004		1								X			
Tee9-S: 1.5	27		1013		1											
Tee9-S: 2.0	28		1018		1											
Tee9-N: 0.5	29		1029		1								X			
Tee9-N: 1.0	30		1032		1								X			
Tee9-N: 1.5	31		1034		1											
Tee9-N: 2.0	32		1036		1											
Tee9-E: 0.5	33		1247		1								X			
Tee9-E: 1.0	34	✓	1249	✓	1								X			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

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Relinquished by:	<u>BJS</u>		<u>Beau Johnson</u>	<u>EPI</u>	<u>4-20-18</u>	<u>12:52</u>
Received by:	<u>WES</u>		<u>WES HERRING</u>	<u>FedEx</u>	<u>4-20-18</u>	<u>12:52 PM</u>
Relinquished by:	<u>Elizabeth M. Bruya</u>		<u>Elizabeth M. Bruya</u>	<u>FBI</u>	<u>4/20/18</u>	<u>1:45</u>
Received by:						

SAMPLE CHAIN OF CUSTODY

Report To 804371 Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature) Betsy Wing

PROJECT NAME

Brookdale

ME

04-20-18

Page # 5 of 8057

PO #

74001

REMARKS

INVOICE TO

EPI

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081			
Tee 9-E: 1.5	35	4/19/18	1252	Soil	1								◆			* Archive all samples not marked for immediate analysis.
Tee 9-E: 2.0	36		1254		1											
Tee 9-B: 0.5	37		1305		1							X				
Tee 9-B: 1.0	38		1307		1							X				
Tee 9-B: 1.5	39		1314		1											
Tee 9-B: 2.0	40		1328		1							◆				
Tee 9-C: 0.5	41		1335		1							X				
Tee 9-C: 1.0	42		1338		1							X				
Tee 9-C: 1.5	43		1341		1											
Tee 9-C: 2.0	44	✓	1345	✓	1							◆				

Friedman & Bruya, Inc.
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 Seattle, WA 98119-2029
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SIGNATURE		PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	<u>[Signature]</u>	<u>Beau Johnson</u>	<u>EPI</u>	<u>4-20-18</u>	<u>12:52</u>
Received by:	<u>[Signature]</u>	<u>Wes Herring</u>	<u>FelEx</u>	<u>4-20-18</u>	<u>1252 PM</u>
Relinquished by:	<u>[Signature]</u>	<u>Elizabeth Webber-Bry</u>	<u>FBI</u>	<u>4/20/18</u>	<u>1345</u>
Received by:					

SAMPLE CHAIN OF CUSTODY

804371
 Report To Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature) Betsy Wong

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPI

ME

04-20-18

Page # 6 of 7

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	8081 Pesticides				
Tea 9-A: 0.5	45	4/19/18	1403	Soil	1								X				* Archive all samples not marked for immediate analysis
Tea 9-A: 1.0	46		1406		1								X				
Tea 9-A: 1.5	47		1408		1												
Tea 9-A: 2.0	48		1410		1												
Tea 14-S: 0.5	49		1430		1								X				
Tea 14-S: 1.0	50 50		1433		1								X				
Tea 14-S: 1.5	51		1441		1												
Tea 14-S: 2.0	52		1450		1												
Tea 14-E: 0.5	53		1456		1								X				
Tea 14-E: 1.0	54		1459		1								X				

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Beau Johnson</u>	<u>EPI</u>	<u>4-20-18</u>	<u>12:52</u>
Received by: <u>[Signature]</u>	<u>Wes Herring</u>	<u>FedEx</u>	<u>4-20-18</u>	<u>12:52pm</u>
Relinquished by: <u>[Signature]</u>	<u>Elizabeth Webber-Bry</u>	<u>FBI</u>	<u>4/20/18</u>	<u>1345</u>
Received by:				

SAMPLE CHAIN OF CUSTODY

Report # 804371
Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature)

Betsy Wing

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPI

ME 04-20-18 Page # 7 of 7

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081				
Tee 14-E: 1.5	55 25	4/19/18	1504	soil	1												Archive all samples not marked for immediate analysis.
Tee 14-E: 2.0	56	4/19/18	1506	soil	1												
Tee 14-N: 0.5	57		1516		1								X				
Tee 14-N: 1.0	58		1520		1								X				
Tee 14-N: 1.5	59		1523		1												
Tee 14-N: 2.0	60	✓	1526	✓	1								◆				
Tee 9-W: 0.5			¹⁰⁵⁰ 1516		1								X				
Tee 9-W: 1.0			¹¹⁰² 1520		1								X				
Tee 9-W: 1.5			1132		1												
Tee 9-W: 2.0		✓	1144	✓	1												

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Beau Johnson</u>	<u>EPI</u>	<u>4-20-18</u>	<u>12:52</u>
Received by: <u>[Signature]</u>	<u>Wes Herring</u>	<u>F&B</u>	<u>4-20-18</u>	<u>12:52 PM</u>
Relinquished by: <u>[Signature]</u>	<u>Elizabeth Webber-Brya</u>	<u>F&B</u>	<u>4/20/18</u>	<u>1345</u>
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

May 11, 2018

Beau Johnson, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 804386

Dear Mr Johnson:

Included are the results from the testing of material submitted on April 23, 2018 from the Brookdale 74001, F&BI 804386 project. There are 28 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0511R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 23, 2018 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 804386 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
804386-01	Tee11-N:0.5
804386-02	Tee11-N:1.0
804386-03	Tee11-N:1.5
804386-04	Tee11-N:2.0
804386-05	Tee11-A:0.5
804386-06	Tee11-A:1.0
804386-07	Tee11-A:1.5
804386-08	Tee11-A:2.0
804386-09	Tee11-NE:0.5
804386-10	Tee11-NE:1.0
804386-11	Tee11-NE:1.5
804386-12	Tee11-NE:2.0
804386-13	Tee11-B:0.5
804386-14	Tee11-B:1.0
804386-15	Tee11-B:1.5
804386-16	Tee11-B:2.0
804386-17	Tee11-SE:0.5
804386-18	Tee11-SE:1.0
804386-19	Tee11-SE:1.5
804386-20	Tee11-SE:2.0
804386-21	Tee11-SW:0.5
804386-22	Tee11-SW:1.0
804386-23	Tee11-SW:1.5
804386-24	Tee11-SW:2.0
804386-25	Tee11-NW:0.5
804386-26	Tee11-NW:1.0
804386-27	Tee11-NW:1.5
804386-28	Tee11-NW:2.0
804386-29	Tee11-S:0.5
804386-30	Tee11-S:1.0
804386-31	Tee11-D:0.5
804386-32	Tee11-D:1.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee11-N:0.5	Client:	Environmental Partners
Date Received:	04/23/18	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/23/18	Lab ID:	804386-01 1/6
Date Analyzed:	04/24/18	Data File:	042435.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	20	121
DBC	88	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee11-N:1.0	Client:	Environmental Partners
Date Received:	04/23/18	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/23/18	Lab ID:	804386-02 1/6
Date Analyzed:	04/24/18	Data File:	042436.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	20	121
DBC	90	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee11-A:0.5	Client:	Environmental Partners
Date Received:	04/23/18	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/23/18	Lab ID:	804386-05 1/6
Date Analyzed:	04/24/18	Data File:	042437.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	20	121
DBC	92	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.37

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee11-A:1.0	Client:	Environmental Partners
Date Received:	04/23/18	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/23/18	Lab ID:	804386-06 1/6
Date Analyzed:	04/24/18	Data File:	042438.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	20	121
DBC	86	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.065

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee11-A:1.5	Client:	Environmental Partners
Date Received:	04/23/18	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/30/18	Lab ID:	804386-07 1/6
Date Analyzed:	05/01/18	Data File:	050140.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.043

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee11-NE:0.5	Client:	Environmental Partners
Date Received:	04/23/18	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/23/18	Lab ID:	804386-09 1/6
Date Analyzed:	04/24/18	Data File:	042439.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	20	121
DBC	91	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee11-NE:1.0	Client:	Environmental Partners
Date Received:	04/23/18	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/23/18	Lab ID:	804386-10 1/6
Date Analyzed:	04/24/18	Data File:	042440.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	20	121
DBC	93	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee11-B:0.5	Client:	Environmental Partners
Date Received:	04/23/18	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/23/18	Lab ID:	804386-13 1/60
Date Analyzed:	04/25/18	Data File:	042536.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83 d	50	150
DBC	84 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	2.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee11-B:1.0	Client:	Environmental Partners
Date Received:	04/23/18	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/23/18	Lab ID:	804386-14 1/6
Date Analyzed:	04/24/18	Data File:	042442.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	20	121
DBC	87	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.59

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee11-B:2.0	Client:	Environmental Partners
Date Received:	04/23/18	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/30/18	Lab ID:	804386-16 1/6
Date Analyzed:	05/01/18	Data File:	050141.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee11-SE:0.5	Client:	Environmental Partners
Date Received:	04/23/18	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/23/18	Lab ID:	804386-17 1/6
Date Analyzed:	04/24/18	Data File:	042443.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	20	121
DBC	91	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.49

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee11-SE:1.0	Client:	Environmental Partners
Date Received:	04/23/18	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/23/18	Lab ID:	804386-18 1/6
Date Analyzed:	04/24/18	Data File:	042444.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	20	121
DBC	86	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.034

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee11-SW:0.5	Client:	Environmental Partners
Date Received:	04/23/18	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/23/18	Lab ID:	804386-21 1/6
Date Analyzed:	04/24/18	Data File:	042450.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee11-SW:1.0	Client:	Environmental Partners
Date Received:	04/23/18	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/23/18	Lab ID:	804386-22 1/6
Date Analyzed:	04/24/18	Data File:	042453.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee11-NW:0.5	Client:	Environmental Partners
Date Received:	04/23/18	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/23/18	Lab ID:	804386-25 1/6
Date Analyzed:	04/24/18	Data File:	042454.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee11-NW:1.0	Client:	Environmental Partners
Date Received:	04/23/18	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/23/18	Lab ID:	804386-26 1/6
Date Analyzed:	04/24/18	Data File:	042455.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee11-S:0.5	Client:	Environmental Partners
Date Received:	04/23/18	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/23/18	Lab ID:	804386-29 1/6
Date Analyzed:	04/25/18	Data File:	042537.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.036

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee11-S:1.0	Client:	Environmental Partners
Date Received:	04/23/18	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/23/18	Lab ID:	804386-30 1/6
Date Analyzed:	04/25/18	Data File:	042538.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee11-D:0.5	Client:	Environmental Partners
Date Received:	04/23/18	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/23/18	Lab ID:	804386-31 1/6
Date Analyzed:	04/25/18	Data File:	042539.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee11-D:1.0	Client:	Environmental Partners
Date Received:	04/23/18	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/23/18	Lab ID:	804386-32 1/6
Date Analyzed:	04/26/18	Data File:	042540.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/30/18	Lab ID:	08-950 mb 1/6
Date Analyzed:	05/01/18	Data File:	050106.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	91	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/23/18	Lab ID:	08-876 mb 1/6
Date Analyzed:	04/24/18	Data File:	042417.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 804386
Date Extracted:	04/23/18	Lab ID:	08-882 mb 1/6
Date Analyzed:	04/24/18	Data File:	042449.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/11/18

Date Received: 04/23/18

Project: Brookdale 74001, F&BI 804386

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804371-41 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.17	102 b	113 b	50-150	10 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	89	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/11/18

Date Received: 04/23/18

Project: Brookdale 74001, F&BI 804386

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804386-21 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	85	86	50-150	1

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	103	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/11/18

Date Received: 04/23/18

Project: Brookdale 74001, F&BI 804386

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804371-08 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	93	89	50-150	4

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	96	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

804386

SAMPLE CHAIN OF CUSTODY

ME 04/23/18

Bo4

Report To Beau Johnson

Company EPI

Address Issaquah, WA 98027

City, State, ZIP 1180 NW Maple St, Ste 310

Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature)

Betsy Wing

PROJECT NAME

Brookdale

PO #

74001

REMARKS

* Addition only per BS 4/23/18
ME

INVOICE TO

EPI

Page # 1 of 4

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081			
Tee11-N: 0.5	01	4/20/18	0803	Soil	1								X			Archive all
Tee11-N: 1.0	02		0808		1								X			samples not
Tee11-N: 1.5	03		0822		1											marked for
Tee11-N: 2.0	04		0827 0859		1											immediate
Tee11-A: 0.5 Tee11-A: 0.5	05		0831		1								X			◆ - per BS
Tee11-A: 1.0	06		0844		1								X			4/27/18 ME
Tee11-A: 1.5	07		0859		1								◆			
Tee11-A: 2.0	08		0907		1											Samples received at 4 °C
Tee11-NE: 0.5	09		0915		1								X			
Tee11-NE: 1.0	10		0918		1								X			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Relinquished by:

Received by:

Relinquished by:

Received by:

PRINT NAME

Beau Schen

Roke

Elizabeth Webb Eng

COMPANY

EPI

Fedex (SDC)

FBI

DATE

4/23/18

4/23/18

4/23/18

TIME

11:10

11:10

1220

804386

SAMPLE CHAIN OF CUSTODY

ME 04/23/18

B04

Report To Beau JohnsonCompany EPIAddress 1180 NW Maple St. Suite 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature)

Betsy Wing

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPIPage # 2 of 4

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081				
Tee 11-NE: 1.5	11	4/20/18	0921	soil	1												Archive all samples not marked for immediate analysis.
Tee 11-NE: 2.0	12		0926		1												
Tee 11-B: 0.5	13		0933		1								X				
Tee 11-B: 1.0	14		0935		1								X				
Tee 11-B: 1.5	15		1001		1												
Tee 11-B: 2.0	16		1011		1								◆				
Tee 11-SE: 0.5	17		1017		1								X				
Tee 11-SE: 1.0	18		1021		1								X				
Tee 11-SE: 1.5	19		1030		1												
Tee 11-SE: 2.0	20		1035		1												

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Beau Johnson</u>	<u>EPI</u>	<u>4/23/18</u>	<u>11:10</u>
Received by: <u>[Signature]</u>	<u>Roke</u>	<u>Fedex (SDC)</u>	<u>3/22/18</u>	<u>11:10</u>
Relinquished by: <u>[Signature]</u>	<u>Elizabeth Webber-Bruya</u>	<u>FBI</u>	<u>4/23/18</u>	<u>1220</u>
Received by:				

804386

SAMPLE CHAIN OF CUSTODY ME 04/23/18

BOY

Report To Beau Johnson

Company EPI

Address 1180 NW Maple St, Suite 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0000 Email beauj@epi-wa.com

SAMPLERS (signature)

Betsy Wing

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPI

Page # 3 of 4

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081			
Tee 11-SW: 0.5	21	4/20/18	1152	Soil	1								X			*Archive all samples not marked for immediate analysis.
Tee 11-SW: 1.0	22		1158		1								X			
Tee 11-SW: 1.5	23		1212		1											
Tee 11-SW: 2.0	24		1221		1											
Tee 11-NW: 0.5	25		1044		1								X			
Tee 11-NW: 1.0	26		1054		1								X			
Tee 11-NW: 1.5	27		1111		1											
Tee 11-NW: 2.0	28		1129		1											
Tee 11-S: 0.5	29		1320		1								X			
Tee 11-S: 1.0	30		1341		1								X			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Relinquished by:

Received by:

Relinquished by:

Received by:

PRINT NAME

Beau Johnson

ROKE

Elizabeth Webber-Bruya

COMPANY

EPI

Fedex (SDC)

FBI

DATE

4/23/18

4/23/18

4/23/18

TIME

11:10

11:10

12:20

804 386

Report To Beau JohnsonCompany EPIAddress 1180 NW Maple St, Suite 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0810 Email beauj@epi-us.com

SAMPLE CHAIN OF CUSTODY

ME 04/23/18Page # 4 of 4Boy 4

SAMPLERS (signature)

Betsy King

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPI

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081				
Tee11-D: 0.5	31	4/20/18	1416	Soil	1								X				Archive all samples not marked for immediate analysis.
Tee11-D: 1.0	32	4/20/18	1425	Soil	1								X				

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Relinquished by:

[Signature]

Received by:

[Signature]

Relinquished by:

[Signature]

Received by:

PRINT NAME

Ben SchwanRokeElizabeth Webber Bruya

COMPANY

EPIFedex (SDC)FBI

DATE

4-23-1823/4/184/23/18

TIME

111011101220

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

May 11, 2018

Beau Johnson, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 74001, F&BI 804406

Dear Mr Johnson:

Included are the results from the testing of material submitted on April 24, 2018 from the 74001, F&BI 804406 project. There are 37 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0511R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 24, 2018 by Friedman & Bruya, Inc. from the Environmental Partners 74001, F&BI 804406 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
804406-01	TEE11-C:0.5
804406-02	TEE11-C:1.0
804406-03	TEE11-C:1.5
804406-04	TEE11-C:2.0
804406-05	TEE15-A:0.5
804406-06	TEE15-A:1.0
804406-07	TEE15-A:1.5
804406-08	TEE15-A:2.0
804406-09	TEE15-W:0.5
804406-10	TEE15-W:1.0
804406-11	TEE15-W:1.5
804406-12	TEE15-W:2.0
804406-13	TEE15-E:0.5
804406-14	TEE15-E:1.0
804406-15	TEE15-E:1.5
804406-16	TEE15-E:2.0
804406-17	TEE15-N:0.5
804406-18	TEE15-N:1.0
804406-19	TEE15-N:1.5
804406-20	TEE15-N:2.0
804406-21	TEE16-SE:0.5
804406-22	TEE16-SE:1.0
804406-23	TEE16-SE:1.5
804406-24	TEE16-SE:2.0
804406-25	TEE16-D:0.5
804406-26	TEE16-D:1.0
804406-27	TEE16-D:1.5
804406-28	TEE16-D:2.0
804406-29	TEE16-SW:0.5
804406-30	TEE16-SW:1.0
804406-31	TEE16-SW:1.5
804406-32	TEE16-SW:2.0
804406-33	TEE16-D-N:0.5
804406-34	TEE16-D-N:1.0
804406-35	TEE16-D-N:1.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (Continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
804406-36	TEE16-D-N:2.0
804406-37	TEE16-C:0.5
804406-38	TEE16-C:1.0
804406-39	TEE16-C:1.5
804406-40	TEE16-C:2.0
804406-41	TEE16-B-W:0.5
804406-42	TEE16-B-W:1.0
804406-43	TEE16-B-W:1.5
804406-44	TEE16-B-W:2.0
804406-45	TEE16-B-E:0.5
804406-46	TEE16-B-E:1.0
804406-47	TEE16-B-E:1.5
804406-48	TEE16-B-E:2.0
804406-49	TEE16-A:0.5
804406-50	TEE16-A:1.0
804406-51	TEE16-A:1.5
804406-52	TEE16-A:2.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE11-C:0.5	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-01 1/60
Date Analyzed:	05/01/18	Data File:	050107A.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	96 d	50	150
DBC	98 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	2.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE11-C:1.0	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-02 1/6
Date Analyzed:	04/27/18	Data File:	042725.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	89	20	121
DBC	102	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.71

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE11-C:2.0	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	05/02/18	Lab ID:	804406-04 1/6
Date Analyzed:	05/07/18	Data File:	050714.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE15-A:0.5	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-05 1/6
Date Analyzed:	04/27/18	Data File:	042726.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	93	20	121
DBC	107	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE15-A:1.0	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-06 1/6
Date Analyzed:	04/27/18	Data File:	042727.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	20	121
DBC	111	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE15-W:0.5	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-09 1/6
Date Analyzed:	04/27/18	Data File:	042728.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	91	20	121
DBC	105	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.083

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE15-W:1.0	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-10 1/6
Date Analyzed:	04/27/18	Data File:	042729.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	89	20	121
DBC	97	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.016

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE15-E:0.5	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-13 1/6
Date Analyzed:	04/27/18	Data File:	042730.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	20	121
DBC	98	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.017

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE15-E:1.0	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-14 1/6
Date Analyzed:	04/27/18	Data File:	042731.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	93	20	121
DBC	110	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.12

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE15-E:2.0	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	05/02/18	Lab ID:	804406-16 1/6
Date Analyzed:	05/07/18	Data File:	050715.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.022

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE15-N:0.5	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-17 1/6
Date Analyzed:	04/26/18	Data File:	042639.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE15-N:1.0	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-18 1/6
Date Analyzed:	04/26/18	Data File:	042640.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE16-SE:0.5	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-21 1/6
Date Analyzed:	04/26/18	Data File:	042641.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE16-SE: 1.0	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-22 1/6
Date Analyzed:	04/26/18	Data File:	042541.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE16-D:0.5	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-25 1/6
Date Analyzed:	04/26/18	Data File:	042542.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	91	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE16-D:1.0	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-26 1/6
Date Analyzed:	04/26/18	Data File:	042543.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE16-SW:0.5	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-29 1/6
Date Analyzed:	04/26/18	Data File:	042544.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE16-SW:1.0	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-30 1/6
Date Analyzed:	04/26/18	Data File:	042642.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE16-D-N:0.5	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-33 1/6
Date Analyzed:	04/26/18	Data File:	042643.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.061

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE16-D-N:1.0	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-34 1/6
Date Analyzed:	04/26/18	Data File:	042644.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.028

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE16-C:0.5	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-37 1/6
Date Analyzed:	04/26/18	Data File:	042645.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE16-C:1.0	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-38 1/6
Date Analyzed:	04/26/18	Data File:	042646.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE16-B-W:0.5	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-41 1/6
Date Analyzed:	04/26/18	Data File:	042647.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE16-B-W:1.0	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-42 1/6
Date Analyzed:	04/26/18	Data File:	042648.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE16-B-E:0.5	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-45 1/6
Date Analyzed:	04/26/18	Data File:	042649.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE16-B-E:1.0	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-46 1/6
Date Analyzed:	04/26/18	Data File:	042652.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE16-A:0.5	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-49 1/6
Date Analyzed:	04/26/18	Data File:	042653.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE16-A:1.0	Client:	Environmental Partners
Date Received:	04/24/18	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	804406-50 1/6
Date Analyzed:	04/26/18	Data File:	042654.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 804406
Date Extracted:	04/25/18	Lab ID:	08-890 mb 1/6
Date Analyzed:	04/25/18	Data File:	042534.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	89	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 804406
Date Extracted:	04/24/18	Lab ID:	08-882 mb2 1/6
Date Analyzed:	04/26/18	Data File:	042638.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 804406
Date Extracted:	05/02/18	Lab ID:	08-960 mb2 1/6
Date Analyzed:	05/06/18	Data File:	050620.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/11/18

Date Received: 04/24/18

Project: 74001, F&BI 804406

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804386-21 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	85	86	50-150	1

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	103	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/11/18

Date Received: 04/24/18

Project: 74001, F&BI 804406

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804406-22 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	<0.01	80	50-150

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	96	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/11/18

Date Received: 04/24/18

Project: 74001, F&BI 804406

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804509-36 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	82	82	50-150	0

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	101	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

804406
 Report To Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-1010 Email beauj@epi-wa.com

ME 04-24-18 Page # 1 of 6

SAMPLERS (signature)

Betsy Wing

PROJECT NAME

Brookdale

PO #

74001

REMARKS

*Dieldrin only per BT ML 4/24/18

INVOICE TO

EPI

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081			
Tee11-C:0.5	01	4/23/18	0814	Soil	1								X			* Archive all
Tee11-C:1.0	02		0820		1								X			samples not
Tee11-C:1.5	03		0823		1											marked for
Tee11-C:2.0	04		0826		1											immediate analysis.
Tee15-A:0.5	05		0847		1								X			per BT
Tee15-A:1.0	06		0848		1								X			5/2/18
Tee15-A:1.5	07		0850		1											ML
Tee15-A:2.0	08		0856		1											
Tee15-W:0.5	09		0904		1								X			
Tee15-W:1.0	10		0909		1								X			Samples received at 4

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Betsy Wing</u>	<u>Betsy Wing</u>	<u>EPI</u>	<u>4/24/18</u>	<u>10:32 AM</u>
Received by: <u>[Signature]</u>	<u>Corel Underdown</u>	<u>Fedex</u>	<u>4/24</u>	<u>10:32 AM</u>
Relinquished by:				
Received by: <u>[Signature]</u>	<u>Nhan Phan</u>	<u>FBI</u>	<u>4/24/18</u>	<u>1200</u>

SAMPLE CHAIN OF CUSTODY

804406
 Report To Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature)

Betsy Wing

PROJECT NAME

Brookdale

REMARKS

ME 04-24-18

Page # 2 of 303

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081			
Tee 15-W: 1.5	-11	4/23/16	0931	Soil	1											Archive all samples not marked for immediate analysis.
Tee 15-W: 2.0	12		0936		1											
Tee 15-E: 0.5	13		0945		1								X			
Tee 15-E: 1.0	14		0947		1								X			
Tee 15-E: 1.5	15		0950		1											
Tee 15-E: 2.0	16		0955		1											
Tee 15-N: 0.5	17		0959		1								X			
Tee 15-N: 1.0	18		1003		1								X			
Tee 15-N: 1.5	19		1007		1											
Tee 15-N: 2.0	20		1015		1											
Samples received at <u>4</u>																

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Betsy Wing</u>	<u>Betsy Wing</u>	<u>EPI</u>	<u>4/24/18</u>	<u>10:32AM</u>
Received by: <u>[Signature]</u>	<u>Daniel W. Anderson</u>	<u>Federal</u>	<u>4/24</u>	<u>10:32AM</u>
Relinquished by:				
Received by: <u>[Signature]</u>	<u>Nhan Phan</u>	<u>FBI</u>	<u>4/24/18</u>	<u>1200</u>

SAMPLE CHAIN OF CUSTODY

804408
 Report To Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-2010 Email beau.j@epi-wa.com

SAMPLERS (signature)

Betsy Wing

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPI

ME 04-24-18 # 3 of 6

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081			
Tee16-SE:0.5	21	4/23/18	1035	Soil	1								X			* Archive all samples not marked for immediate analysis.
Tee16-SE:1.0	22		1038		1								X			
Tee16-SE:1.5	23		1047		1											
Tee16-SE:2.0	24		1051		1											
Tee16-D:0.5	25		1058		1								X			
Tee16-D:1.0	26		1106		1								X			
Tee16-D:1.5	27		1136		1											
Tee16-D:2.0	28		1145		1											
Tee16-SW:0.5	29		1247		1								X			
Tee16-SW:1.0	30		1251		1								X			Samples received at

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Betsy Wing</u>	<u>Betsy Wing</u>	<u>EPI</u>	<u>4/24/18</u>	<u>10:32AM</u>
Received by: <u>Dorell Underwood</u>	<u>Dorell Underwood</u>	<u>Fedex</u>	<u>4/24</u>	<u>10:32AM</u>
Relinquished by:				
Received by: <u>Nhan Phan</u>	<u>Nhan Phan</u>	<u>FedEx</u>	<u>4/24/18</u>	<u>1200</u>

SAMPLE CHAIN OF CUSTODY

804406
 Report To Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email beau.j@epi-wa.com

SAMPLERS (signature) Betsy Wing

PROJECT NAME Brookdale

REMARKS

ME 04-24-18

Page # 4 of 6

PO #

74001

INVOICE TO

EPI

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081			
Tee 16-SW: 1.5	31	4/23/18	1257 1325	Soil	1											*Archive all samples not marked for immediate analysis.
Tee 16-SW: 2.0	32		1309 1406		1											
Tee 16-D-N: 0.5	33		1316		1								X			
Tee 16-D-N: 1.0	34		1325		1								X			
Tee 16-D-N: 1.5	35		1338		1											
Tee 16-D-N: 2.0	36		1346		1											
Tee 16-C: 0.5	37		1351		1								X			
Tee 16-C: 1.0	38		1357		1								X			
Tee 16-C: 1.5	39		1406		1											
Tee 16-C: 2.0	40		1409		1											Samples received at

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Betsy Wing</u>	<u>Betsy Wing</u>	<u>EPI</u>	<u>4/24/18</u>	<u>10:32AM</u>
Received by: <u>Sohel Uddin</u>	<u>Sohel Uddin</u>	<u>Feder</u>	<u>4/24</u>	<u>10:32AM</u>
Relinquished by:				
Received by: <u>Nhan Phan</u>	<u>Nhan Phan</u>	<u>FEBI</u>	<u>4/24/18</u>	<u>1200</u>

SAMPLE CHAIN OF CUSTODY

804406
 Report To Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature)

Betsy Wing

PROJECT NAME

Brookdale

ME 04-24-18

Page # 5 of 6

PO #

74001

REMARKS

INVOICE TO

EPI

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8051				
Tee116-B-W:0.5	41	4/23/18	1417	Soil									X				Archive all samples not marked for immediate analysis.
Tee116-B-W:1.0	42		1418										X				
Tee116-B-W:1.5	43		1430														
Tee116-B-W:2.0	44		1432														
Tee116-B-E:0.5	45		1436										X				
Tee116-B-E:1.0	46		1438										X				
Tee116-B-E:1.5	47		1500														
Tee116-B-E:2.0	48		1505														
Tee116-A:0.5	49		1512										X				
Tee116-A:1.0	50	↓	1524	↓									X				Samples received at

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>Betsy Wing</i>	Betsy Wing	EPI	4/24/18	10:32AM
Received by: <i>[Signature]</i>	Don Underdown	Fedex	4/24	10:32AM
Relinquished by:				
Received by: <i>[Signature]</i>	William Phan	FBI	4/24/18	1200

ME 04-24-18 Page# 6 of 6

804406
Report To Beau Johnson
Company EPI
Address 1180 NW Maple St, Suite 310
City, State, ZIP Issaquah, WA 98027
Phone (425) 395-0010 Email beau.j@epi-wa.com

SAMPLERS (signature)
PROJECT NAME

PROJECT NAME
Brookdale

REMARKS




PO # 4001

INVOICE TO
EPI

<p>TURNAROUND TIME</p> <p><input checked="" type="checkbox"/> Standard Turnaround</p> <p><input type="checkbox"/> RUSH _____</p> <p>Rush charges authorized by: _____</p>	
<p>SAMPLE DISPOSAL</p> <p><input type="checkbox"/> Dispose after 30 days</p> <p><input checked="" type="checkbox"/> Archive Samples</p> <p><input type="checkbox"/> Other _____</p>	

[illegible]

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Betsy Wing	EPI	4/24/18	10:32am
Received by: 	David Henderson	Fedex	4/24	10:32am
Relinquished by:				
Received by: 	Nhan Phan	FBI	4/24/18	1200

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

May 21, 2018

Beau Johnson, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 74001, F&BI 804450

Dear Mr Johnson:

Included are the results from the testing of material submitted on April 26, 2018 from the 74001, F&BI 804450 project. There are 31 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0521R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 26, 2018 by Friedman & Bruya, Inc. from the Environmental Partners 74001, F&BI 804450 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
804450-01	Tee16-NE:0.5
804450-02	Tee16-NE:1.0
804450-03	Tee16-NE:1.5
804450-04	Tee16-NE:2.0
804450-05	Tee17-N:0.5
804450-06	Tee17-N:1.0
804450-07	Tee17-N:1.5
804450-08	Tee17-N:2.0
804450-09	Tee17-NW:0.5
804450-10	Tee17-NW:1.0
804450-11	Tee17-NW:1.5
804450-12	Tee17-NW:2.0
804450-13	Tee17-B:0.5
804450-14	Tee17-B:1.0
804450-15	Tee17-NE:0.5
804450-16	Tee17-NE:1.0
804450-17	Tee17-NE:1.5
804450-18	Tee17-NE:2.0
804450-19	Tee17-D:1.5
804450-20	Tee17-D2.0
804450-21	Tee17-SW:0.5
804450-22	Tee17-SW:1.5
804450-23	Tee17-C:0.5
804450-24	Tee17-C:2.0
804450-25	Tee17-C:2.5
804450-26	Tee17-SE:0.5
804450-27	Tee17-SE:1.0
804450-28	Tee17-SE:1.5
804450-29	Tee17-SE:2.0
804450-30	Tee17-S:0.5
804450-31	Tee17-S:1.0
804450-32	Tee17-S:1.5
804450-33	Tee17-S:2.0
804450-34	Tee17-D:0.5
804450-35	Tee17-D:1.0
804450-36	Tee17-SW:1.5
804450-37	Tee17-SW:2.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee16-NE:0.5	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	04/26/18	Lab ID:	804450-01 1/6
Date Analyzed:	04/30/18	Data File:	043042.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.011

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee16-NE:1.0	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	04/26/18	Lab ID:	804450-02 1/6
Date Analyzed:	05/01/18	Data File:	043045.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee17-N:0.5	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	04/26/18	Lab ID:	804450-05 1/6
Date Analyzed:	05/01/18	Data File:	043046.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee17-N:1.0	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	04/26/18	Lab ID:	804450-06 1/6
Date Analyzed:	05/01/18	Data File:	043047.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee17-NW:0.5	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	04/26/18	Lab ID:	804450-09 1/6
Date Analyzed:	05/01/18	Data File:	043048.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee17-NW:1.0	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	04/26/18	Lab ID:	804450-10 1/6
Date Analyzed:	05/01/18	Data File:	043049.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee17-B:0.5	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	04/26/18	Lab ID:	804450-13 1/6
Date Analyzed:	05/01/18	Data File:	043050.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee17-B:1.0	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	04/26/18	Lab ID:	804450-14 1/6
Date Analyzed:	05/01/18	Data File:	043051.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee17-NE:0.5	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	04/26/18	Lab ID:	804450-15 1/6
Date Analyzed:	05/01/18	Data File:	043052.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee17-NE:1.0	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	04/26/18	Lab ID:	804450-16 1/6
Date Analyzed:	05/01/18	Data File:	043053.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee17-D:1.5	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	05/08/18	Lab ID:	804450-19 1/6
Date Analyzed:	05/09/18	Data File:	050907.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee17-D2.0	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	05/14/18	Lab ID:	804450-20 1/6
Date Analyzed:	05/15/18	Data File:	051540.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.17

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee17-SW:0.5	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	04/26/18	Lab ID:	804450-21 1/60
Date Analyzed:	05/03/18	Data File:	050308.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	91 d	50	150
DBC	182 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	4.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee17-SW:1.5	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	04/26/18	Lab ID:	804450-22 1/6
Date Analyzed:	05/01/18	Data File:	050108.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.057

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee17-C:0.5	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	04/26/18	Lab ID:	804450-23 1/6
Date Analyzed:	05/01/18	Data File:	050109.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee17-C:2.0	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	04/26/18	Lab ID:	804450-24 1/6
Date Analyzed:	05/01/18	Data File:	050110.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee17-SE:0.5	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	04/26/18	Lab ID:	804450-26 1/6
Date Analyzed:	05/01/18	Data File:	050111.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee17-SE:1.0	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	04/26/18	Lab ID:	804450-27 1/6
Date Analyzed:	05/01/18	Data File:	050112.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee17-S:0.5	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	04/26/18	Lab ID:	804450-30 1/6
Date Analyzed:	05/01/18	Data File:	050113.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.51

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee17-S:1.0	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	04/26/18	Lab ID:	804450-31 1/6
Date Analyzed:	05/01/18	Data File:	050114.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.21

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee17-S:2.0	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	05/08/18	Lab ID:	804450-33 1/6
Date Analyzed:	05/09/18	Data File:	050908.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.033

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee17-D:0.5	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	04/26/18	Lab ID:	804450-34 1/60
Date Analyzed:	05/03/18	Data File:	050309.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	95 d	50	150
DBC	178 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	6.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee17-D:1.0	Client:	Environmental Partners
Date Received:	04/26/18	Project:	74001, F&BI 804450
Date Extracted:	04/26/18	Lab ID:	804450-35 1/6
Date Analyzed:	05/01/18	Data File:	050116.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 804450
Date Extracted:	04/26/18	Lab ID:	08-919 mb 1/6
Date Analyzed:	04/30/18	Data File:	043041.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	90	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 804450
Date Extracted:	05/08/18	Lab ID:	08-988 mb 1/6
Date Analyzed:	05/09/18	Data File:	050906.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	98	50	150
DBC	114	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 804450
Date Extracted:	05/14/18	Lab ID:	08-1046 mb 1/6
Date Analyzed:	05/15/18	Data File:	051517.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	89	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/21/18

Date Received: 04/26/18

Project: 74001, F&BI 804450

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 805107-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	3.7	181 b	102 b	50-150	56 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	98	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/21/18

Date Received: 04/26/18

Project: 74001, F&BI 804450

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804450-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.011	78	87	50-150	11

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	102	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/21/18

Date Received: 04/26/18

Project: 74001, F&BI 804450

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804450-20 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.13	89 b	108 b	50-150	19 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	100	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

804450

SAMPLE CHAIN OF CUSTODY

ME 04/26/18

BOS 84
Page # 1 of 6

Report To Beau Johnson

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature)

Betsy Wing

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPI

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HClD	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 808			
Tee 16-NE: 0.5	01	4/25/18	0805	soil	1								X			* Archive all samples not marked for immediate analysis.
Tee 16-NE: 1.0	02		0812		1								X			
Tee 16-NE: 1.5	03		0819		1											
Tee 16-NE: 2.0	04		0841		1											
Tee 17-N: 0.5	05		0856		1								X			
Tee 17-N: 1.0	06		0904		1								X			
Tee 17-N: 1.5	07		0921		1											
Tee 17-N: 2.0	08		0936		1											
Tee 17-NW: 0.5	09		0941		1								X			
Tee 17-NW: 1.0	10		0944		1								X			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Relinquished by:

Betsy Wing

Received by:

Michael Edlahl

Relinquished by:

Received by:

PRINT NAME

Betsy Wing

Michael Edlahl

COMPANY

EPI

FABry

DATE

4/26/18

TIME

0630

Samples received at 4 °C

204450

SAMPLE CHAIN OF CUSTODY

ME 04/26/18

2805 of 84

Report To Beau JohnsonCompany EPIAddress 1180 NW maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

PO #

REMARKS

INVOICE TO

Page #

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081			
Tee 17-NW: 1.5	11	4/25/18	0958	Soil	1											<input checked="" type="checkbox"/> per BW 4/25/18 ME Notes Archive all samples not scheduled for immediate analysis.
Tee 17-NW: 2.0	12		1005		1											
Tee 17-B: 0.5	13		1014		1											
Tee 17-B: 1.0	14		1100		1											
Tee 17-B: 1.5					1											
Tee 17-B: 2.0					1											
Tee 17-NE: 0.5	15		1112		1											
Tee 17-NE: 1.0	16		1136		1											
Tee 17-NE: 1.5	17		1142		1											
Tee 17-NE: 2.0	18		1146		1											

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE		PRINT NAME		COMPANY	DATE	TIME
Relinquished by:	<i>Betsy Wing</i>	PRINT NAME	Betsy Wing	EPI	4/26/18	0630
Received by:	<i>Michael Erlich</i>	PRINT NAME	Michael Erlich	FAB	4/26/18	↓
Relinquished by:						
Received by:						
				Samples received at 4:00		

804450

SAMPLE CHAIN OF CUSTODY

ME 04/26/18

3 B05 84
EWB

Report To Beau Johnson

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email beauj@epi-am.com

SAMPLERS (signature)

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPI

Page # of

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081				
Tee 17-D: 1.5	19	4/25/18	1347	soil	1								◆				* Archive all samples not marked for immediate analysis.
Tee 17-D: 2.0	20		1352		1								⊕				
Tee 17-SW: 0.5	21		1400		1								⊗				
Tee 17-SW: 1.0	22		1404		1								⊗				⊕ per BT
Tee 17-C: 0.5	23		1418		1								⊗				S/10/18 MC
Tee 17-C: 2.0	24		1520		1								⊗				
Tee 17-C: 2.5	25		1545		1												
Tee 17-SE: 0.5	26		1240		1								⊗				* Added at
Tee 17-SE: 1.0	27		1243		1								⊗				Lab EWB
Tee 17-SE: 1.5	28		1250		1												

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>Betsy Wing</i>	Betsy Wing	4/2 EPI	4/26/18	0630
Received by: <i>Michael E. L. H.</i>	Michael E. L. H.	FLBm	4/26/18	6
Relinquished by:				
Received by:		Samples received at	4 °C	

804450

SAMPLE CHAIN OF CUSTODY

ME 04-26-18

Page # 4 of 4

Report To Beau Johnson

Company EPI

Address 118 NW Maple St

City, State, ZIP Issaquah

Phone Email

SAMPLERS (signature)

PROJECT NAME

PO #

REMARKS

INVOICE TO

*COC Generated in Lab

TURNAROUND TIME

☐ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081				
Tee 17-SE:2.0	29	04/25/18	1253	Soil	1												(X) Per BW
Tee 17-S:0.5	30		1302		1								(X)				4/25/18 EWB
Tee 17-S:1.0	31		1310		1								(X)				
Tee 17-S:1.5	32		1321		1												
Tee 17-S:2.0	33		1326		1								◆				◆ per BS
Tee 17-D:0.5	34		1336		1								(X)				5/3/18 ME
Tee 17-D:1.0	35		1339		1								(X)				
Tee 17-SW:1.5	36		1406		1												
Tee 17-SW:2.0	37		1410		1												

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:				
Received by: <i>[Signature]</i>	Elizabeth Webber-Bruya	FBI	4/26/18	810
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

May 16, 2018

Beau Johnson, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 804509

Dear Mr Johnson:

Included are the results from the testing of material submitted on April 27, 2018 from the Brookdale 74001, F&BI 804509 project. There are 39 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0516R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 27, 2018 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 804509 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
804509-01	Tee18-S:0.5
804509-02	Tee18-S:1.0
804509-03	Tee18-S:1.5
804509-04	Tee18-S:2.0
804509-05	Tee18-A:0.5
804509-06	Tee18-A:1.0
804509-07	Tee18-A:1.5
804509-08	Tee18-A:2.0
804509-09	Tee18-E:0.5
804509-10	Tee18-E:1.0
804509-11	Tee18-E:1.5
804509-12	Tee18-E:2.0
804509-13	Tee18-NW:0.5
804509-14	Tee18-NW:1.0
804509-15	Tee18-NW:1.5
804509-16	Tee18-NW:2.0
804509-17	Tee1-C:2.0
804509-18	Tee1-C:2.5
804509-19	Tee1-NE:0.5
804509-20	Tee1-NE:1.0
804509-21	Tee1-NE:1.5
804509-22	Tee1-NE:2.0
804509-23	Tee1-B:0.5
804509-24	Tee1-B:1.0
804509-25	Tee1-B:1.5
804509-26	Tee1-B:2.0
804509-27	Tee1-A:0.5
804509-28	Tee1-A:1.0
804509-29	Tee1-A:1.5
804509-30	Tee1-A:2.0
804509-31	Tee1-SW:0.5
804509-32	Tee1-SW:1.0
804509-33	Tee1-SW:1.5
804509-34	Tee1-SW:2.0
804509-35	Tee1-S:0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (Continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
804509-36	Tee1-S:1.0
804509-37	Tee1-S:1.5
804509-38	Green5:2.0
804509-39	Green5:2.5
804509-40	Tee1-S:2.0
804509-41	Green5-S:0.5
804509-42	Green5-S:1.0
804509-43	Green5-S:1.5
804509-44	Green5-S:2.0
804509-45	Green5-NW:0.5
804509-46	Green5-NW:1.0
804509-47	Green5-NW:1.5
804509-48	Green5-NW:2.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee18-S:0.5	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-01 1/6
Date Analyzed:	05/02/18	Data File:	050228.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.47

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee18-S:1.0	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-02 1/6
Date Analyzed:	05/02/18	Data File:	050229.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.31

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee18-S:2.0	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/09/18	Lab ID:	804509-04 1/6
Date Analyzed:	05/09/18	Data File:	050955.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee18-A:0.5	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-05 1/60
Date Analyzed:	05/03/18	Data File:	050314.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86 d	50	150
DBC	178 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee18-A:1.0	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-06 1/6
Date Analyzed:	05/02/18	Data File:	050231.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.33

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee18-A:2.0	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/09/18	Lab ID:	804509-08 1/6
Date Analyzed:	05/10/18	Data File:	050958.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	111	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.34

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee18-E:0.5	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-09 1/6
Date Analyzed:	05/02/18	Data File:	050232.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.46

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee18-E:1.0	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-10 1/6
Date Analyzed:	05/02/18	Data File:	050233.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.054

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee18-NW:0.5	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-13 1/6
Date Analyzed:	05/02/18	Data File:	050234.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee18-NW:1.0	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-14 1/6
Date Analyzed:	05/02/18	Data File:	050235.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee1-C:2.0	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-17 1/6
Date Analyzed:	05/02/18	Data File:	050236.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee1-NE:0.5	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-19 1/6
Date Analyzed:	05/02/18	Data File:	050237.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.15

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee1-NE:1.0	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-20 1/6
Date Analyzed:	05/02/18	Data File:	050238.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.044

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee1-B:0.5	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-23 1/6
Date Analyzed:	05/02/18	Data File:	050239.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.037

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee1-B:1.0	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-24 1/6
Date Analyzed:	05/02/18	Data File:	050240.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee1-A:0.5	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-27 1/6
Date Analyzed:	05/02/18	Data File:	050241.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee1-A:1.0	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-28 1/6
Date Analyzed:	05/02/18	Data File:	050242.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee1-SW:0.5	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-31 1/6
Date Analyzed:	05/03/18	Data File:	050311.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.14

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee1-SW:1.0	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-32 1/6
Date Analyzed:	05/03/18	Data File:	050312.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.51

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee1-SW:2.0	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/09/18	Lab ID:	804509-34 1/6
Date Analyzed:	05/10/18	Data File:	050959.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	111	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.15

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee1-S:0.5	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-35 1/6
Date Analyzed:	05/03/18	Data File:	050313.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee1-S:1.5	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-36 1/6
Date Analyzed:	05/02/18	Data File:	050213.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green5:2.0	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-38 1/6
Date Analyzed:	05/02/18	Data File:	050215.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.093

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green5:2.5	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/09/18	Lab ID:	804509-39 1/6
Date Analyzed:	05/10/18	Data File:	050960.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	121	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.70

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green5-S:0.5	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-41 1/6
Date Analyzed:	05/02/18	Data File:	050216.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.16

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green5-S:1.0	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-42 1/6
Date Analyzed:	05/02/18	Data File:	050217.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.18

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green5-S:2.0	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/09/18	Lab ID:	804509-44 1/6
Date Analyzed:	05/10/18	Data File:	050961.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.092

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green5-NW:0.5	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-45 1/60
Date Analyzed:	05/03/18	Data File:	050315.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84 d	50	150
DBC	181 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	7.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green5-NW:1.0	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	804509-46 1/6
Date Analyzed:	05/02/18	Data File:	050227.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.18

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green5-NW:2.0	Client:	Environmental Partners
Date Received:	04/27/18	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/09/18	Lab ID:	804509-48 1/6
Date Analyzed:	05/10/18	Data File:	050962.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.028

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	04/30/18	Lab ID:	08-952 mb2 1/6
Date Analyzed:	05/02/18	Data File:	050226.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	88	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/09/18	Lab ID:	08-1028 mb 1/6
Date Analyzed:	05/09/18	Data File:	050954.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	92	50	150
DBC	111	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 804509
Date Extracted:	05/01/18	Lab ID:	08-960 mb 1/6
Date Analyzed:	05/02/18	Data File:	050225.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	88	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/16/18

Date Received: 04/27/18

Project: Brookdale 74001, F&BI 804509

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804509-36 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	82	82	50-150	0

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	101	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/16/18

Date Received: 04/27/18

Project: Brookdale 74001, F&BI 804509

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804525-39 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.22	144 b	107 b	50-150	29 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	100	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/16/18

Date Received: 04/27/18

Project: Brookdale 74001, F&BI 804509

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804509-04 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	85	89	50-150	5

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	90	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

804509

SAMPLE CHAIN OF CUSTODY

ME 04-27-18

COS 5

Report To

Beau Johnson

Company

EPI

Address

1180 NW Maple St, Suite 310

City, State, ZIP

Issaquah, WA 98027

Phone (425) 395-0010

Email

beauj@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

Brookdale

PO #

74061

REMARKS

*Dioldrin only per
BJ EWS

INVOICE TO

EPI

Page #

of

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081			
Tee 18-S: 0.5	01	4/26/18	0814	Soil	1								X			* Archive all samples not marked for immediate analysis.
Tee 18-S: 1.0	02		0821		1								X			
Tee 18-S: 1.5	03		0835		1											
Tee 18-S: 2.0	04		0838		1								◆			
Tee 18-A: 0.5	05		0844		1								X			
Tee 18-A: 1.0	06		0847		1								X			
Tee 18-A: 1.5	07		0849		1											
Tee 18-A: 2.0	08		0857		1								◆			
Tee 18-E: 0.5	09		0905		1								X			
Tee 18-E: 1.0	10		0908		1								X			Samples received at 4:00

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>Betsy Wing</i>	Betsy Wing	EPI		
Received by: <i>Will Perkins</i>	Will Perkins	FedEx	04/27	1414
Relinquished by: <i>Misty Szwedzi</i>	Misty Szwedzi	EPI	4/27	1414
Received by: <i>E. Webb Bruya</i>	Elizabeth Webber Bruya	FBI	4/27/18	1600

804509

SAMPLE CHAIN OF CUSTODY

ME 04-27-18

C05

Report To Beau JohnsonCompany EPIAddress 1180 NW Maple StCity, State, ZIP Issaquah, WA 98027

Phone _____ Email _____

SAMPLERS (signature) MEPage # 2 of 5

PROJECT NAME

PO #

Brookdale74001

REMARKS

INVOICE TO

* COC page generated in Lab. EMB

TURNAROUND TIME

☐ Standard Turnaround☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other _____

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081			
Tee 18-E:1.5	11	4/26/18	0911	Soil	1											
Tee 18-E:2.0	12		0914		1											
Tee 18-NW:0.5	13		0921		1								X			
Tee 18-NW:1.0	14		0924		1								X			
Tee 18-NW:1.5	15		0930		1											
Tee 18-NW:2.0	16		0932		1											
Tee 18 ^{FW} -C:2.0	17		1002		1								X			
Tee 1-C:2.5	18		1015		1											
Tee 1-NE:0.5	19		1026		1								X			
Tee 1-NE:1.0	20		1029		1								X			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:				
Received by: <u>E. D. Webb</u>	<u>Elizabeth Webber-Bruya</u>	<u>F? B?</u>	<u>4/27/18</u>	<u>1600</u>
Relinquished by:				
Received by:				

SAMPLE CHAIN OF CUSTODY

ME 04-27-18

Page # 3 of 5

804509
 Report To Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature)

Betsy Wing

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPI

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081			
Tree-NE:1.5	21	4/26/18	1033	Soil	1											Archive all samples not marked for immediate analysis.
Tree-NE:2.0	22		1040		1											
Tree-B:0.5	23		1043		1								X			
Tree-B:1.0	24		1049		1								X			
Tree-B:1.5	25		1059		1											
Tree-B:2.0	26		1104		1											
Tree-A:0.5	27		1120		1								X			
Tree-A:1.0	28		1124		1								X			
Tree-A:1.5	29		1135		1											
Tree-A:2.0	30		1137		1											

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Betsy Wing</u>	<u>Betsy Wing</u>	<u>EPI</u>		
Received by: <u>Will Perkins</u>	<u>Will Perkins</u>	<u>FedEx SDC</u>	<u>04/27</u>	<u>1414</u>
Relinquished by: <u>Misty Sgualborini</u>	<u>Misty Sgualborini</u>	<u>EPI</u>	<u>4/27</u>	<u>17:14</u>
Received by: <u>Elizabeth Webber-Bruya</u>	<u>Elizabeth Webber-Bruya</u>	<u>FBI</u>	<u>4/27</u>	<u>1600</u>

SAMPLE CHAIN OF CUSTODY

Report To 804509 Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-2010 Email beauj@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

Brookdale

REMARKS

ME 04-27-18

Page # 4 of 5

TURNAROUND TIME

☒ Standard Turnaround
☐ RUSH
 Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081			
Tee 1-SW: 0.5	31	4/26/18	1224	Soil	1								X			Archive all samples not marked for immediate analysis
Tee 1-SW: 1.0	32		1227		1								X			
Tee 1-SW: 1.5	33		1229		1											
Tee 1-SW: 2.0	34		1232		1											
Tee 1-S: 0.5	35		1244		1								X			
Tee 1-S: 1.0	36		1252		1								X			
Tee 1-S: 1.5	37		1258		1											
Green 5: 2.0	38		1333		1								X			
Green 5: 2.5	39		1415		1											
Green 5 Tee 1-S: 2.0	40		1300		1											

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Betsy Wing</u>	<u>Betsy Wing</u>	<u>EPI</u>		
Received by: <u>Will Perkins</u>	<u>Will Perkins</u>	<u>FedEx</u>	<u>04/27</u>	<u>1414</u>
Relinquished by: <u>Misty Squillace</u>	<u>Misty Squillace</u>	<u>EPI</u>	<u>4/27</u>	<u>1414</u>
Received by: <u>Elizabeth Webber-Bruya</u>	<u>Elizabeth Webber-Bruya</u>	<u>FBI</u>	<u>4/27</u>	<u>1600</u>

804509

SAMPLE CHAIN OF CUSTODY

ME 04-27-18 5 COS 5

Report To Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Ste 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email beau@epiwa.com

SAMPLERS (signature)

PROJECT NAME

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081				
Green S-S: 0.5	41	4/26/18	1424										X				Archive all samples not marked for immediate analysis.
Green S-S: 1.0	42		1430										X				
Green S-S: 1.5	43		1445														
Green S-S: 2.0	44		1452														
Green S-NW: 0.5	45		1458										X				
Green S-NW: 1.0	46		1502										X				
Green S-NW: 1.5	47		1507														
Green S-NW: 2.0	48		1510														

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Betsy Wing</u>	<u>Betsy Wing</u>	<u>EPI</u>		
Received by: <u>Will Perkins</u>	<u>Will Perkins</u>	<u>FedEx SDC</u>	<u>04/27</u>	<u>1414</u>
Relinquished by: <u>Misty Szelkewit</u>	<u>Misty Szelkewit</u>	<u>EPI</u>	<u>4/27</u>	<u>14:14</u>
Received by: <u>Elizabeth Webber-Bruya</u>	<u>Elizabeth Webber-Bruya</u>	<u>FBI</u>	<u>4/27/18</u>	<u>1600</u>

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

May 16, 2018

Beau Johnson, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 804525

Dear Mr Johnson:

Included are the results from the testing of material submitted on April 30, 2018 from the Brookdale 74001, F&BI 804525 project. There are 32 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0516R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 30, 2018 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 804525 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
804525-01	Tee12-SW:0.5
804525-02	Tee12-SW:1.0
804525-03	Tee12-SW:1.5
804525-04	Tee12-SW:2.0
804525-05	Tee12-SE:0.5
804525-06	Tee12-SE:1.0
804525-07	Tee12-SE:1.5
804525-08	Tee12-SE:2.0
804525-09	Tee12-E:0.5
804525-10	Tee12-E:1.0
804525-11	Tee12-E:1.5
804525-12	Tee12-E:2.0
804525-13	Tee12-D:0.5
804525-14	Tee12-D:1.0
804525-15	Tee12-D:1.5
804525-16	Tee12-D:2.0
804525-17	Tee12-NE:0.5
804525-18	Tee12-NE:1.0
804525-19	Tee12-NE:1.5
804525-20	Tee12-NE:2.0
804525-21	Tee12-W-0.5
804525-22	Tee12-W-1.0
804525-23	Tee12-W-1.5
804525-24	Tee12-W-2.0
804525-25	Tee12-N-0.5
804525-26	Tee12-N-1.0
804525-27	Tee12-N-1.5
804525-28	Tee12-N-2.0
804525-29	Tee12-B-0.5
804525-30	Tee12-B-1.0
804525-31	Tee12-B-1.5
804525-32	Tee12-B-2.0
804525-33	Tee12-C:2.0
804525-34	Tee-13-SE:0.5
804525-35	Tee-13-SE:1.0
804525-36	Tee-13-SE:1.5
804525-37	Tee-13-SE:2.0
804525-38	Tee-13-B:0.5
804525-39	Tee-13-B:1.0
804525-40	Tee-13-B:1.5
804525-41	Tee-13-B:2.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee12-SW:0.5	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	804525-01 1/6
Date Analyzed:	05/03/18	Data File:	050355.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee12-SW:1.0	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	804525-02 1/6
Date Analyzed:	05/04/18	Data File:	050356.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee12-SE:0.5	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	804525-05 1/6
Date Analyzed:	05/04/18	Data File:	050357.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.46

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee12-SE:1.0	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	804525-06 1/6
Date Analyzed:	05/04/18	Data File:	050358.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee12-SE:2.0	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	05/08/18	Lab ID:	804525-08 1/6
Date Analyzed:	05/11/18	Data File:	051115.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.18

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee12-E:0.5	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	804525-09 1/60
Date Analyzed:	05/07/18	Data File:	050710.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84 d	50	150
DBC	91 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee12-E:1.0	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	804525-10 1/6
Date Analyzed:	05/04/18	Data File:	050360.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.41

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee12-E:2.0	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	05/08/18	Lab ID:	804525-12 1/6
Date Analyzed:	05/11/18	Data File:	051116.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.047

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee12-D:0.5	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	804525-13 1/6
Date Analyzed:	05/04/18	Data File:	050361.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee12-D:1.0	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	804525-14 1/6
Date Analyzed:	05/04/18	Data File:	050362.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee12-NE:0.5	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	804525-17 1/6
Date Analyzed:	05/04/18	Data File:	050363.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee12-NE:1.0	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	804525-18 1/6
Date Analyzed:	05/04/18	Data File:	050364.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee12-W-0.5	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	804525-21 1/6
Date Analyzed:	05/06/18	Data File:	050621.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee12-W-1.0	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	804525-22 1/6
Date Analyzed:	05/06/18	Data File:	050622.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee12-N-0.5	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	804525-25 1/6
Date Analyzed:	05/06/18	Data File:	050623.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee12-N-1.0	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	804525-26 1/6
Date Analyzed:	05/06/18	Data File:	050624.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee12-B-0.5	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	804525-29 1/6
Date Analyzed:	05/06/18	Data File:	050625.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee12-B-1.0	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	804525-30 1/6
Date Analyzed:	05/06/18	Data File:	050626.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	105	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee12-C:2.0	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	804525-33 1/6
Date Analyzed:	05/06/18	Data File:	050627.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee-13-SE:0.5	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	804525-34 1/6
Date Analyzed:	05/06/18	Data File:	050628.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.22

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee-13-SE:1.0	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	804525-35 1/6
Date Analyzed:	05/06/18	Data File:	050629.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.024

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee-13-B:0.5	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	804525-38 1/60
Date Analyzed:	05/07/18	Data File:	050723.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76 d	50	150
DBC	95 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	4.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee-13-B:1.0	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	804525-39 1/6
Date Analyzed:	05/02/18	Data File:	050214.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.22

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee-13-B:2.0	Client:	Environmental Partners
Date Received:	04/30/18	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	05/08/18	Lab ID:	804525-41 1/6
Date Analyzed:	05/11/18	Data File:	051117.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.067

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	08-952 mb 1/6
Date Analyzed:	05/02/18	Data File:	050212.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	04/30/18	Lab ID:	08-951 mb 1/6
Date Analyzed:	05/03/18	Data File:	050332.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	89	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 804525
Date Extracted:	05/08/18	Lab ID:	08-1025 mb 1/6
Date Analyzed:	05/11/18	Data File:	051125.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	89	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/16/18

Date Received: 04/30/18

Project: Brookdale 74001, F&BI 804525

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804525-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	93	90	50-150	3

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	101	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/16/18

Date Received: 04/30/18

Project: Brookdale 74001, F&BI 804525

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804525-39 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.22	144 b	107 b	50-150	29 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	100	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/16/18

Date Received: 04/30/18

Project: Brookdale 74001, F&BI 804525

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 705114-11 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	4.9	0 b	0 b	50-150	nm

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	88	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

804525

SAMPLE CHAIN OF CUSTODY

ME 04/30/18

COS

Report To Beau Johnson

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email beauje@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPI

Page # 1 of 4

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

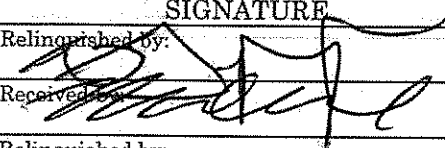
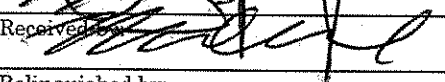
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8061			
TEE 12-SW: 0.5	501601	4/27/18	8:21	Soil	1								X			*Archive all samples not marked for immediate analysis
TEE 12-SW: 1.0	02		8:24		1								X			
TEE 12-SW: 1.5	03		8:30		1								X			
TEE 12-SW: 2.0	04		8:33		1								X			
TEE 12-SE: 0.5	05		8:44		1								X			- per BS 5/7/18 ME
TEE 12-SE: 1.0	06		8:49		1								X			
TEE 12-SE: 1.5	07		8:55		1								X			
TEE 12-SE: 2.0	08		9:05		1								X			
TEE 12-E: 0.5	09		9:15		1								X			
TEE 12-E: 1.0	10		9:18		1								X			Samples received at 4 °C

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	N. HINSPIENGER	EPI	4/30/18	0623
Received by: 	Michael Edsall	FLBm	↓	↓
Relinquished by:				
Received by:				
Samples received at ____ °C				

804525

SAMPLE CHAIN OF CUSTODY ME 04/30/18

ced

Report To Beau Johnson

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPI

Page # 2 of 4

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Residues 8081			
TEE 12-E: 1.5	Soil 11	4/27/18	0922	Soil	1											# Archive all samples not marked for immediate analysis.
TEE 12-E: 2.0	12		0925	Soil	21											
TEE 12-D: 0.5	13		0936		1								X			
TEE 12-D: 1.0	14		0938		1								X			
TEE 12-D: 1.5	15		0942		1											
TEE 12-D: 2.0	16		0944		1											
TEE 12-E: 0.5	17		1001		1								X			
TEE 12-E: 1.0	18		1004		1								X			
TEE 12-E: 1.5	19		1010		1											
TEE 12-E: 2.0	20		1015													

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Relinquished by:

Received by:

Relinquished by:

Received by:

PRINT NAME

N. HINSINGER

Michael Endahl

COMPANY

EPI

FEB Inc

DATE

4/30/18

↓

TIME

0623

↓

Samples received at 4 °C

NE

804525

SAMPLE CHAIN OF CUSTODY

ME 04/30/18

COS

Report To Beau JohnsonCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature)

Betsy Wing

PROJECT NAME

Brookdale

PO #

74601

REMARKS

INVOICE TO

EPIPage # 3 of 4

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HClD	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8051			
TEE12-W:0.5	Soil 21	4/27/18	1027	Soil	1								X			* Archive all samples not marked for immediate analysis.
TEE12-W:1.0	22		1030		1								X			
TEE12-W:1.5	23		1035		1											
TEE12-W:2.0	24		1046		1											
TEE12-N:0.5	25		1106		1								X			
TEE12-N:1.0	26		1110		1								X			
TEE12-N:1.5	27		1116		1											
TEE12-N:2.0	28		1125		1											
TEE12-B:0.5	29		1235		1								X			
TEE12-B:1.0	30		1239		1								X			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>N. HINSPELGER</u>	<u>EPI</u>	<u>4/30/18</u>	<u>0623</u>
Received by: <u>[Signature]</u>	<u>Michael Erlich</u>	<u>F&B Inc</u>	<u>↓</u>	<u>↓</u>
Relinquished by:			<u>4</u>	<u>00</u>
Received by:		Samples received at		

804322

SAMPLE CHAIN OF CUSTODY

ME 04/30/18

COS

Report To Beau JohnsonCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (206) 395-0010 Email beauj@epi-wa.comSAMPLERS (signature) Page # 34 of 4

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPI

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other _____

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Residue			
TEE12-B:1.5	601131	4/27/18	1242	Soil	1											*Archive all
TBB12-B:2.0	32		1244		1											Samples not marked for immediate analysis
TEE12-C:2.0	33		1255		1								X			
TEE13-SE:0.5	34		1322		1								X			
TBB13-SE:1.0	35		1328		1								X			
TBB13-SE:1.5	36		1352		1											
TEE13-SE:2.0	37		1354		1											
TEE13-B:0.5	38		1404		1								X			
TBE13-B:1.0	39		1413		1								X			
TBE13-B:1.5	40		1433		1											
TEE13-B:2.0	41		1436		1											

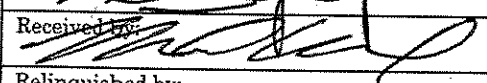
Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Relinquished by: Received by: 

Relinquished by:

Received by:

PRINT NAME

N. LINSEPERGER
Michael Eller

COMPANY

EPI
F&B Inc.

DATE

4/30/18

TIME

0623Samples received at 4 °C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

May 18, 2018

Beau Johnson, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 805024

Dear Mr Johnson:

Included are the results from the testing of material submitted on May 2, 2018 from the Brookdale 74001, F&BI 805024 project. There are 43 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0518R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 2, 2018 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 805024 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
805024 -01	Green 7-E:0.5
805024 -02	Green 7-E:1.0
805024 -03	Green 7-E:1.5
805024 -04	Green 7-E:2.0
805024 -05	Green 7-W:0.5
805024 -06	Green 7-W:1.0
805024 -07	Green 7-W:1.5
805024 -08	Green 7-W:2.0
805024 -09	Green 7-NW:0.5
805024 -10	Green 7-NW:1.0
805024 -11	Green 7-NW:1.5
805024 -12	Green 7-NW:2.0
805024 -13	Green 8:0.5
805024 -14	Green 8:1.0
805024 -15	Green 8:1.5
805024 -16	Green 8:2.0
805024 -17	Green 8-S:0.5
805024 -18	Green 8-S:1.0
805024 -19	Green 8-S:1.5
805024 -20	Green 8-S:2.0
805024 -21	Green 8-NE:0.5
805024 -22	Green 8-NE:1.0
805024 -23	Green 8-NE:1.5
805024 -24	Green 8-NE:2.0
805024 -25	Green 8-NW:0.5
805024 -26	Green 8-NW:1.0
805024 -27	Green 8-NW:1.5
805024 -28	Green 8-NW:2.0
805024 -29	Green 9:0.5
805024 -30	Green 9:1.0
805024 -31	Green 9:1.5
805024 -32	Green 9:2.0
805024 -33	Green 9-S:0.5
805024 -34	Green 9-S:1.0
805024 -35	Green 9-S:1.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (Continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
805024 -36	Green 9-S:2.0
805024 -37	Green 9-NE:0.5
805024 -38	Green 9-NE:1.0
805024 -39	Green 9-NE:1.5
805024 -40	Green 9-NE:2.0
805024 -41	Green 9-NW:0.5
805024 -42	Green 9-NW:1.0
805024 -43	Green 9-NW:1.5
805024 -44	Green 9-NW:2.0
805024 -45	Green 10-SE:0.5
805024 -46	Green 10-SE:1.0
805024 -47	Green 10-SE:1.5
805024 -48	Green 10-SE:2.0
805024 -49	Green 10-W:0.5
805024 -50	Green 10-W:1.0
805024 -51	Green 10-W:1.5
805024 -52	Green 10-W:2.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 7-E:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-01 1/6
Date Analyzed:	05/07/18	Data File:	050724.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.55

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 7-E:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-02 1/6
Date Analyzed:	05/07/18	Data File:	050716.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 7-E:2.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/14/18	Lab ID:	805024-04 1/6
Date Analyzed:	05/15/18	Data File:	051521.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	110	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.22

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 7-W:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-05 1/6
Date Analyzed:	05/07/18	Data File:	050717.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.38

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 7-W:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-06 1/6
Date Analyzed:	05/07/18	Data File:	050718.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.080

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 7-W:1.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/14/18	Lab ID:	805024-07 1/6
Date Analyzed:	05/15/18	Data File:	051522.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 7-NW:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-09 1/6
Date Analyzed:	05/07/18	Data File:	050719.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.017

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 7-NW:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-10 1/6
Date Analyzed:	05/07/18	Data File:	050720.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 8:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-13 1/600
Date Analyzed:	05/09/18	Data File:	050915.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71 d	50	150
DBC	65 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	6.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 8:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-14 1/6
Date Analyzed:	05/07/18	Data File:	050722.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.056

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 8-S:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-17 1/6
Date Analyzed:	05/07/18	Data File:	050743.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.73

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 8-S:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-18 1/6
Date Analyzed:	05/07/18	Data File:	050744.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.14

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 8-S:2.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/14/18	Lab ID:	805024-20 1/6
Date Analyzed:	05/15/18	Data File:	051523.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.032

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 8-NE:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-21 1/60
Date Analyzed:	05/09/18	Data File:	050916.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85 d	50	150
DBC	110 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 8-NE:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-22 1/6
Date Analyzed:	05/07/18	Data File:	050730.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 8-NE:2.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/14/18	Lab ID:	805024-24 1/6
Date Analyzed:	05/15/18	Data File:	051524.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 8-NW:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-25 1/60
Date Analyzed:	05/09/18	Data File:	050917.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75 d	50	150
DBC	113 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	2.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 8-NW:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-26 1/60
Date Analyzed:	05/09/18	Data File:	050918.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75 d	50	150
DBC	120 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 8-NW:2.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/14/18	Lab ID:	805024-28 1/6
Date Analyzed:	05/15/18	Data File:	051525.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.031

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 9:2.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-32 1/6
Date Analyzed:	05/07/18	Data File:	050733.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.29

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 9-S:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-33 1/6
Date Analyzed:	05/07/18	Data File:	050734.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 9-S:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-34 1/6
Date Analyzed:	05/07/18	Data File:	050735.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	57	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.039

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 9-NE:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-37 1/60
Date Analyzed:	05/09/18	Data File:	050919.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71 d	50	150
DBC	98 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 9-NE:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-38 1/6
Date Analyzed:	05/07/18	Data File:	050737.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 9-NE:2.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/14/18	Lab ID:	805024-40 1/6
Date Analyzed:	05/15/18	Data File:	051526.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	115	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.42

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 9-NW:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-41 1/600
Date Analyzed:	05/09/18	Data File:	050920.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	57 d	50	150
DBC	107 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	4.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 9-NW:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-42 1/6
Date Analyzed:	05/06/18	Data File:	050614.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.13

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 9-NW:2.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/14/18	Lab ID:	805024-44 1/6
Date Analyzed:	05/15/18	Data File:	051527.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.80

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 10-SE:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-45 1/6
Date Analyzed:	05/07/18	Data File:	050739.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.36

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 10-SE:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-46 1/6
Date Analyzed:	05/07/18	Data File:	050740.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.093

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 10-SE:1.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/14/18	Lab ID:	805024-47 1/6
Date Analyzed:	05/15/18	Data File:	051528.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.016

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 10-W:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-49 1/6
Date Analyzed:	05/07/18	Data File:	050741.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.18

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 10-W:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	805024-50 1/6
Date Analyzed:	05/07/18	Data File:	050742.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 10-W:2.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/14/18	Lab ID:	805024-52 1/6
Date Analyzed:	05/15/18	Data File:	051532.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	08-971 mb 1/6
Date Analyzed:	05/06/18	Data File:	050609.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/02/18	Lab ID:	08-970 mb 1/6
Date Analyzed:	05/07/18	Data File:	050709.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 805024
Date Extracted:	05/14/18	Lab ID:	08-1046 mb 1/6
Date Analyzed:	05/15/18	Data File:	051517.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	89	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/18/18

Date Received: 05/02/18

Project: Brookdale, F&BI 805024

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 805024-42 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.13	126 b	128 b	50-150	2 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	102	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/18/18

Date Received: 05/02/18

Project: Brookdale, F&BI 805024

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 805024-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.55	73 b	65 b	50-150	12 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/18/18

Date Received: 05/02/18

Project: Brookdale, F&BI 805024

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804450-20 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.13	89 b	108 b	50-150	19 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	100	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

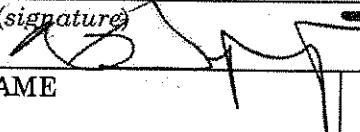
vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

805024

SAMPLE CHAIN OF CUSTODY ME 05/04/18

C04

Report To BEAN JOHNSONCompany EPIAddress 1180 NW MAPLE ST. SUITE 310City, State, ZIP ISSAQUAH, WA 98027Phone (425) 395-0010 Email _____SAMPLERS (signature) Page # 1 of 6

PROJECT NAME

PO #

BROOKDALE

REMARKS

INVOICE TO

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other _____

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	PESTICIDES 802			
GREEN 7-E:0.5	01	5/1/18	0816	Soil	1								X			ARCHIVE
Green 7-E:1.0	02		0818										X			SAMPLES NOT
Green 7-E:1.5	03		0837													MARKED FOR ANALYSIS
Green 7-E:2.0	04		0846										◆			◆ per BT
GREEN 7-W:0.5	05		851										X			S/9/18 ME
GREEN 7-W:1.0	06		853										X			
GREEN 7-W:1.5	07		855										◆			
GREEN 7-W:2.0	08		858													
GREEN 7-NW:0.5	09		908										X			
GREEN 7-NW:1.0	10	V	910	V	N								X			Samples received at <u>2</u> °C


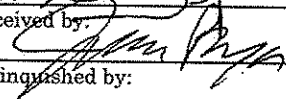
SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by: Received by: 

Relinquished by: _____

Received by: _____

N. LINSPERGER

EPI

05/02/18 650

James Bruya

F&B

5/2 650

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

805024

SAMPLE CHAIN OF CUSTODY

ME 05/02/18

Page # 2 of 6 copy

Report To BEAN JOHNSONCompany EPIAddress 1180 NW MAPLE ST. SUITE 310City, State, ZIP ISSAQUAH, WA 98027Phone (425) 385-0010 Email

SAMPLERS (signature)

PROJECT NAME

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other


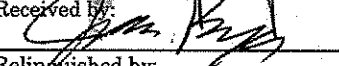
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	PETROLEUM 8081			
GREEN 7-NW: 1.5	11	5/1/18	912	soil	1											
GREEN 7-NW: 2.0	12		916													
GREEN 8: 0.5	13		940										X			
GREEN 8: 1.0	14		941										X			
GREEN 8: 1.5	15		952													
GREEN 8: 2.0	16		955													
GREEN 8-S: 0.5	17		1003										X			
GREEN 8-S: 1.0	18		1009										X			
GREEN 8-S: 1.5	19		1059													
GREEN 8-S: 2.0	20		1101													

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	N. LINSPENGER	EPI	05/02/18	650
Received by: 	James Bruya	F&B	5/2/18	650
Relinquished by:				
Received by:				

805024

SAMPLE CHAIN OF CUSTODY ME 05/02/18

Page # 3 of 6

Report To Beau Johnson

Company EPI

Address 1180 NW Maple St.

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0000 Email beauj@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other


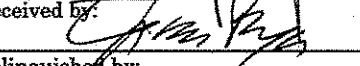
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	PESTICIDES 8081			
GREEN 8 - NE : 0.5	21	05/01/18	1110	SOIL	1								X			
GREEN 8 - NE : 1.0	22		1111										X			
GREEN 8 - NE : 1.5	23		1114													
GREEN 8 - NE : 2.0	24		1116													
GREEN 8 - NW : 0.5	25		1124										X			
GREEN 8 - NW : 1.0	26		1126										X			
GREEN 8 - NW : 1.5	27		1129													
GREEN 8 - NW : 2.0	28		1135													
GREEN 9 : 0.5	29		1225													
GREEN 9 : 1.0	30	✓	1227	✓	✓											

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	N. HINSPERGER	EPI	05/02/18	650
Received by: 	Janis Bruya	F & B	5/2	1050
Relinquished by:				
Received by:				

805024

SAMPLE CHAIN OF CUSTODY

ME 05/02/18

C04 4 of 6
Page # 4 of 6

Report To Beau Johnson

Company EPI

Address 1180 NW Maple St.

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0060 Email beaj@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

74001

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other


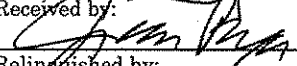
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	PESTICIDES 808			
GREEN 9-1.5	31	5/1/18	1229	Soil	1											
GREEN 9-2.0	32		1240										X			
GREEN 9-5:0.5	33		1252										X			
GREEN 9-5:1.0	34		1259										X			
GREEN 9-5:1.5	35		1324													
GREEN 9-5:2.0	36		1330													
GREEN 9-NE:0.5	37		1344										X			
GREEN 9-NE:1.0	38		1346										X			
Green 9-NE:1.5	39		1359													
Green 9-NE:2.0	40		1407													

Friedman & Bruya, Inc.

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Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	N. HINSPENGER	EPI	05/02/18	650
Received by: 	JAMES BRUYA	F&B	5/2/18	650
Relinquished by:				
Received by:				

805024

SAMPLE CHAIN OF CUSTODY ME 05/02/18

COY

Page # 5 of 6

Report To BEAR JOHNSONCompany EPIAddress 1180 NW MAPLE ST. SUITE 310City, State, ZIP ISSAQUAH, WA 98027Phone (425) 395-0010 Email _____

SAMPLERS (signature)

PROJECT NAME

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other _____

ANALYSES REQUESTED

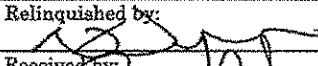

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081	Notes
GREEN 9 - NW: 0.5	41	05/01/18	1420	Soil	1								X	
GREEN 9 - NW: 1.0	42		1422										X	
GREEN 9 - NW: 1.5	43		1424											
GREEN 9 - NW: 2.0	44		1427										◆	
GREEN 10 - SE: 0.5	45		1440										X	
GREEN 10 - SE: 1.0	46		1441										X	
GREEN 10 - SE: 1.5	47		1454										◆	
GREEN 10 - SE: 2.0	48		1501											
GREEN 10 - W: 0.5	49		1510										X	
GREEN 10 - W: 1.0	50		1514										X	

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	N. HINSPERGER	EPI	05/02/18	650
Received by: 	JAMES BRUYA	F&B	5/2	650
Relinquished by: _____				
Received by: _____				

805024

SAMPLE CHAIN OF CUSTODY

ME 05/02/18

CW4

Report To BEAL JOHNSONCompany EPIAddress 1180 NW MAPLE ST. SUITE 310City, State, ZIP ISSAQUAH, WA - 98027Phone (425) 395-0010 Email _____SAMPLERS (signature) 

PROJECT NAME

BROOKDALE

PO #

REMARKS

INVOICE TO

Page # 6 of 6

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other

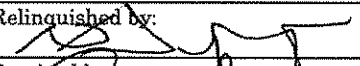
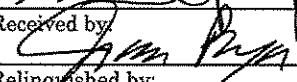
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	PESTICIDES 8281			
GREEN 10-W-1.5	51	05/01/18	1525	SOIL	1											
GREEN 10-W-2.0	52	↓	1533	↓	↓											

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

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SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	N. HINSINGER	EPI	05/02/18	650
Received by: 	JAMES BRUYA	F&B	5/2	650
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

May 18, 2018

Beau Johnson, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 74001, F&BI 805025

Dear Mr Johnson:

Included are the results from the testing of material submitted on May 2, 2018 from the 74001, F&BI 805025 project. There are 47 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0518R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 2, 2018 by Friedman & Bruya, Inc. from the Environmental Partners 74001, F&BI 805025 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
805025 -01	Green 5-E:0.5
805025 -02	Green 5-E:1.0
805025 -03	Green 5-E:1.5
805025 -04	Green 5-E:2.0
805025 -05	Tee 13-N:0.5
805025 -06	Tee 13-N:1.0
805025 -07	Tee 13-N:1.5
805025 -08	Tee 13-N:2.0
805025 -09	Tee 13-NW:0.5
805025 -10	Tee 13-NW:1.0
805025 -11	Tee 13-NW:1.5
805025 -12	Tee 13-NW:2.0
805025 -13	Tee 13-C:2.0
805025 -14	Tee 13-C:2.5
805025 -15	Tee 13-SW:0.5
805025 -16	Tee 13-SW:1.0
805025 -17	Tee 13-SW:1.5
805025 -18	Tee 13-SW:2.0
805025 -19	Tee 13-D:0.5
805025 -20	Tee 13-D:1.0
805025 -21	Tee 13-D:1.5
805025 -22	Tee 13-D:2.0
805025 -23	Tee 13-D-SE:0.5
805025 -24	Tee 13-D-SE:1.0
805025 -25	Tee 13-D-SE:1.5
805025 -26	Tee 13-D-SE:2.0
805025 -27	Tee 13-D-SW:0.5
805025 -28	Tee 13-D-SW:1.0
805025 -29	Tee 13-D-SW:1.5
805025 -30	Tee 13-D-SW:2.0
805025 -31	Tee 13-D-NW:0.5
805025 -32	Tee 13-D-NW:1.0
805025 -33	Tee 13-D-NW:1.5
805025 -34	Tee 13-D-NW:2.0
805025 -35	Green 6:2.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (Continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
805025 -36	Green 6:2.5
805025 -37	Green 6-NE:0.5
805025 -38	Green 6-NE:1.0
805025 -39	Green 6-NE:1.5
805025 -40	Green 6-NE:2.0
805025 -41	Green 6-S:0.5
805025 -42	Green 6-S:1.0
805025 -43	Green 6-S:1.5
805025 -44	Green 6-S:2.0
805025 -45	Green 6-W:0.5
805025 -46	Green 6-W:1.0
805025 -47	Green 6-W:1.5
805025 -48	Green 6-W:2.0
805025 -49	Green 7:2.0
805025 -50	Green 7:2.5
805025 -51	Green 7-N:0.5
805025 -52	Green 7-N:1.0
805025 -53	Green 7-N:1.5
805025 -54	Green 7-N:2.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 5-E:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-01 1/600
Date Analyzed:	05/09/18	Data File:	050914.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78 d	50	150
DBC	80 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	23

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 5-E:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-02 1/6
Date Analyzed:	05/03/18	Data File:	050334.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.076

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 5-E:1.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/09/18	Lab ID:	805025-03 1/6
Date Analyzed:	05/14/18	Data File:	051408.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	114	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.051

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 13-N:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-05 1/6
Date Analyzed:	05/03/18	Data File:	050335.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.54

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 13-N:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-06 1/6
Date Analyzed:	05/03/18	Data File:	050336.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.42

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 13-N:2.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/09/18	Lab ID:	805025-08 1/6
Date Analyzed:	05/14/18	Data File:	051407.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.020

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 13-NW:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-09 1/60
Date Analyzed:	05/07/18	Data File:	050712.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85 d	50	150
DBC	91 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 13-NW:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-10 1/60
Date Analyzed:	05/07/18	Data File:	050713.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75 d	50	150
DBC	80 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 13-NW:2.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/09/18	Lab ID:	805025-12 1/6
Date Analyzed:	05/14/18	Data File:	051406.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	112	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.97

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 13-C:2.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-13 1/6
Date Analyzed:	05/03/18	Data File:	050339.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.081

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 13-C:2.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-14 1/6
Date Analyzed:	05/03/18	Data File:	050340.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.17

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 13-SW:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-15 1/6
Date Analyzed:	05/03/18	Data File:	050341.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.34

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 13-SW:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-16 1/6
Date Analyzed:	05/03/18	Data File:	050342.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.13

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 13-SW:2.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/09/18	Lab ID:	805025-18 1/6
Date Analyzed:	05/11/18	Data File:	051118.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.011

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 13-D:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-19 1/6
Date Analyzed:	05/03/18	Data File:	050343.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	68	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 13-D:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-20 1/6
Date Analyzed:	05/03/18	Data File:	050344.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 13-D-SE:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-23 1/6
Date Analyzed:	05/03/18	Data File:	050345.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	88	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 13-D-SE:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-24 1/6
Date Analyzed:	05/03/18	Data File:	050346.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 13-D-SW:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-27 1/6
Date Analyzed:	05/03/18	Data File:	050347.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	88	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 13-D-SW:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-28 1/6
Date Analyzed:	05/03/18	Data File:	050348.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 13-D-NW:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-31 1/6
Date Analyzed:	05/03/18	Data File:	050351.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Tee 13-D-NW:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-32 1/6
Date Analyzed:	05/03/18	Data File:	050352.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 6:2.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-35 1/6
Date Analyzed:	05/03/18	Data File:	050353.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.67

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 6:2.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-36 1/6
Date Analyzed:	05/03/18	Data File:	050354.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 6-NE:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-37 1/6
Date Analyzed:	05/06/18	Data File:	050631.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.93

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 6-NE:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-38 1/6
Date Analyzed:	05/06/18	Data File:	050632.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.29

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 6-NE:2.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/09/18	Lab ID:	805025-40 1/6
Date Analyzed:	05/11/18	Data File:	051119.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.050

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 6-S:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-41 1/6
Date Analyzed:	05/06/18	Data File:	050633.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.39

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 6-S:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-42 1/6
Date Analyzed:	05/06/18	Data File:	050634.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.085

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 6-S:1.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/09/18	Lab ID:	805025-43 1/6
Date Analyzed:	05/11/18	Data File:	051120.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 6-W:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-45 1/6
Date Analyzed:	05/06/18	Data File:	050635.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	161	50	150
DBC	208	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.80

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 6-W:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-46 1/6
Date Analyzed:	05/06/18	Data File:	050636.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 6-W:2.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/09/18	Lab ID:	805025-48 1/6
Date Analyzed:	05/11/18	Data File:	051121.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 7:2.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-49 1/6
Date Analyzed:	05/06/18	Data File:	050637.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 7:2.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-50 1/6
Date Analyzed:	05/06/18	Data File:	050639.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.085

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 7-N:0.5	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-51 1/60
Date Analyzed:	05/07/18	Data File:	050728.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72 d	50	150
DBC	96 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 7-N:1.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	805025-52 1/6
Date Analyzed:	05/06/18	Data File:	050641.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	109	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.61

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 7-N:2.0	Client:	Environmental Partners
Date Received:	05/02/18	Project:	74001, F&BI 805025
Date Extracted:	05/09/18	Lab ID:	805025-54 1/6
Date Analyzed:	05/11/18	Data File:	051122.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	115	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.24

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	08-960 mb2 1/6
Date Analyzed:	05/06/18	Data File:	050620.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 805025
Date Extracted:	05/02/18	Lab ID:	08-966 mb 1/6
Date Analyzed:	05/03/18	Data File:	050350.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	89	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 805025
Date Extracted:	05/09/18	Lab ID:	08-1028 mb 1/6
Date Analyzed:	05/09/18	Data File:	050954.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	92	50	150
DBC	111	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/18/18

Date Received: 05/02/18

Project: 74001, F&BI 805025

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804509-36 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	82	82	50-150	0

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	101	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/18/18

Date Received: 05/02/18

Project: 74001, F&BI 805025

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 805025-01 1/6 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	5.7 ve	117 b	0 b	50-150	nm

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	105	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/18/18

Date Received: 05/02/18

Project: 74001, F&BI 805025

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804509-04 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	85	89	50-150	5

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	90	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

805025

SAMPLE CHAIN OF CUSTODY

ME 03/02/18

C05

Report To Beau Johnson

Company EPI

Address 1180 NW Maple St.

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0060 Email beaujeepi-wa.com

SAMPLERS (signature)

Page # 1 of 6

PROJECT NAME

PO #

74001

REMARKS

INVOICE TO

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081				
GREEN 5-E:0.5	01	4/3-118	812	Soil	1								X				per BS
GREEN 5-E:1.0	02		814										X				5/9/18 ME
GREEN 5-E:1.5	03		816														
GREEN 5-E:2.0	04		823														
TEE 13-N:0.5	05		841										X				
TEE 13-N:1.0	06		843										X				
TEE 13-N:1.5	07		847														
TEE 13-N:2.0	08		850														
TEE 13-NW:0.5	09		858										X				
TEE 13-NW:1.0	10		901										X				Samples received at 2 °C

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Received by:

Relinquished by:

Received by:

N. HINSBERGER

James Bruya

EPI

F&B

05/02/18

5/2

650

650

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

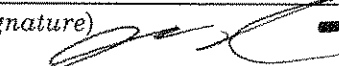
Ph. (206) 285-8282

905025

SAMPLE CHAIN OF CUSTODY

ME 05/02/18

COS

Report To Beau JohnsonCompany EPIAddress 1120 NW Maple St.City, State, ZIP Issaquah, WAPhone 425-395-2000 Email beau.johnson@epi-wa.comSAMPLERS (signature) 

PROJECT NAME

74001

PO #

REMARKS

INVOICE TO

Page # 2 of 6

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other _____

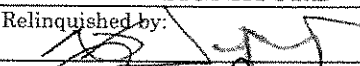
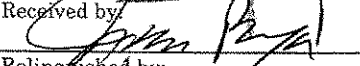
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8021			
TEE 13 - NW: 1.5	11	4/30/18	903	Soil	1											
TEE 13 - NW: 2.0	12		906													Hold
TEE 13 - C: 2.0	13		920										X			
TEE 13 - C: 2.5	14		941										X			
TEE 13 - SW: 0.5	15		959										X			
TEE 13 - SW: 1.0	16		1006										X			
TEE 13 - SW: 1.5	17		1012													
TEE 13 - SW: 2.0	18		1016													
TEE 13 - D: 0.5	19		1030										X			
TEE 13 - D: 1.0	20		1032										X			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	N. HINSPERGER	EPI	05/02/18	650
Received by: 	JAMES BRUYA	F&B	5/2	650
Relinquished by:				
Received by:				

805025

SAMPLE CHAIN OF CUSTODY ME 05/02/18

COS

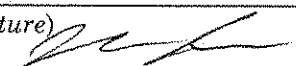
Report To Beau Johnson

Company EPI

Address 1180 NW Maple St.

City, State, ZIP Issaquah, WA

Phone 425-385-0060 Email beauj@epi-wa.com

SAMPLERS (signature) 

PROJECT NAME

74001

PO #

REMARKS

INVOICE TO

Page # 3 of 6

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other


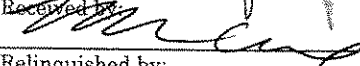
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Permeability by 8021B			
TEE 13-D: 1.5	21	4/30/18	1034	Soil	1											
TEE 13-D: 2.0	22		1036													
TEE 13-DSE: 0.5	23		1045										X			
TEE 13-DSE: 1.0	24		1046										X			
TEE 13-DSE: 1.5	25		1047													
TEE 13-DSE: 2.0	26		1048													
TEE 13-D-SW: 0.5	27		1113										X			
TEE 13-D-SW: 1.0	28		1114										X			
TEE 13-D-SW: 1.5	29		1116													
TEE 13-D-SW: 2.0	30	✓	1118	✓	✓											

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	N. HINSPERGER	EPI	05/02/18	650
Received by: 	Michael Endlich	F&B Inc	5/2/18	650
Relinquished by:				
Received by:				

805025

SAMPLE CHAIN OF CUSTODY

ME 05/02/18

Page # 4 of 6

Report To Beau Johnson

Company EPI

Address 1180 NW Maple St.

City, State, ZIP Issaquah, WA 98027

Phone 425-395-4616 Email beauj@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

74001

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides by 8021			
TEE 13-D-NW:0.5	31	4/30/18	1125	Soil	1								X			
TEE 13-D-NW:1.0	32		1127										X			
TEE 13-D-NW:1.5	33		1128													
TEE 13-D-NW:2.0	34		1130													
GREEN 6:2.0	35		1301										X			
GREEN 6:2.5	36		1316										X			
GREEN 6-NE:0.5	37		1325										X			
GREEN 6-NE:1.0	38		1327										X			
GREEN 6-NE:1.5	39		1330													
GREEN 6-NE:2.0	40	✓	1354	✓	✓								◆			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Relinquished by:

Received by:

Relinquished by:

Received by:

PRINT NAME

N. WINSPELGER

Michael Endell

COMPANY

EPI

F&B

DATE

05/02/18

L

TIME

0850

L

805025

SAMPLE CHAIN OF CUSTODY

ME 05/02/18

Page # 5 of 6

Report To Beau JohnsonCompany EPIAddress 1680 NW Maple St.City, State, ZIP Issaquah, WAPhone 425-393-2010 Email beau.j@epi-wa.comSAMPLERS (signature) [Signature]

PROJECT NAME

74001

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other _____

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Perfluorides by 8021			
GREEN 6-S:0.5	41	4/30/18	1402	3081	1								X			
GREEN 6-S:1.0	42		1404										X			
GREEN 6-S:1.5	43		1417										◆			
GREEN 6-S:2.0	44		1419													
GREEN 6-W:0.5	45		1424										X			
GREEN 6-W:1.0	46		1427										X			
GREEN 6-W:1.5	47		1430													
GREEN 6-W:2.0	48		1433										◆			
GREEN 7:2.0	49		1502										X			
GREEN 7:2.5	50		1506										X			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	N. HINSINGER	EPI	05/02/18	656
Received by: <u>[Signature]</u>	Michael E-dub	F&B	↓	↓
Relinquished by:				
Received by:				

805025

SAMPLE CHAIN OF CUSTODY

ME 05/02/18 Page # 6 of 6

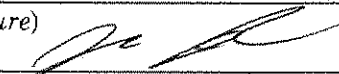
Report To Beau Johnson

Company EPI

Address 180 NW Maple St.

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email beauj@epi-wa.com

SAMPLERS (signature) 

PROJECT NAME

24001

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other

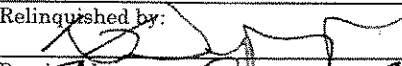
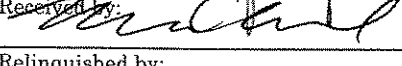
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides by 8021				
GREEN 7-N:0.5	51	4/30/18	1516	soil	1								X				
GREEN 7-N:1.0	52	↓	1518	↓	↓								X				
GREEN 7-N:1.5	53	↓	1530	↓	↓												
GREEN 7-N:2.0	54	↓	1535	↓	↓												

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	N. LINSBERGER	EPI	05/02/18	6:00
Received by: 	Michael Engel	F&Bm	↓	↓
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

May 21, 2018

Beau Johnson, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale, F&BI 805048

Dear Mr Johnson:

Included are the results from the testing of material submitted on May 3, 2018 from the Brookdale, F&BI 805048 project. There are 44 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0521R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 3, 2018 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale, F&BI 805048 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
805048 -01	Green 10:0.5
805048 -02	Green 10:1.0
805048 -03	Green 10:1.5
805048 -04	Green 10:2.0
805048 -05	Green 10-NE:0.5
805048 -06	Green 10-NE:1.0
805048 -07	Green 10-NE:1.5
805048 -08	Green 10-NE:2.0
805048 -09	Green 11-W:0.5
805048 -10	Green 11-W:1.0
805048 -11	Green 11-W:1.5
805048 -12	Green 11-W:2.0
805048 -13	Green 11:0.5
805048 -14	Green 11:1.0
805048 -15	Green 11:1.5
805048 -16	Green 11:2.0
805048 -17	Green 11-E:0.5
805048 -18	Green 11-E:1.0
805048 -19	Green 11-E:1.5
805048 -20	Green 11-E:2.0
805048 -21	Green 11-S:0.5
805048 -22	Green 11-S:1.0
805048 -23	Green 11-S:1.5
805048 -24	Green 11-S:2.0
805048 -25	Green 12:0.5
805048 -26	Green 12:1.0
805048 -27	Green 12:1.5
805048 -28	Green 12:2.0
805048 -29	Green 12-E:0.5
805048 -30	Green 12-E:1.0
805048 -31	Green 12-E:1.5
805048 -32	Green 12-E:2.0
805048 -33	Green 12-W:0.5
805048 -34	Green 12-W:1.0
805048 -35	Green 12-W:1.5
805048 -36	Green 12-W:2.0
805048 -37	Green 12-S:0.5
805048 -38	Green 12-S:1.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (Continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
805048 -39	Green 12-S:1.5
805048 -40	Green 12-S:2.0
805048 -41	Green 13-NE:0.5
805048 -42	Green 13-NE:1.0
805048 -43	Green 13-NE:1.5
805048 -44	Green 13-NE:2.0
805048 -45	Green 13-S:0.5
805048 -46	Green 13-S:1.0
805048 -47	Green 13-S:1.5
805048 -48	Green 13-S:2.0
805048 -49	Green 13:0.5
805048 -50	Green 13:1.0
805048 -51	Green 13:1.5
805048 -52	Green 13:2.0
805048 -53	Green 13-NW:0.5
805048 -54	Green 13-NW:1.0
805048 -55	Green 13-NW:1.5
805048 -56	Green 13-NW:2.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 10:2.0	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-04 1/6
Date Analyzed:	05/08/18	Data File:	050829.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.24

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 10-NE:0.5	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-05 1/6
Date Analyzed:	05/08/18	Data File:	050806.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	127	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.72

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 10-NE:1.0	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-06 1/6
Date Analyzed:	05/08/18	Data File:	050807.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	115	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.31

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 10-NE:2.0	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/14/18	Lab ID:	805048-08 1/6
Date Analyzed:	05/15/18	Data File:	051533.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.054

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 11-W:0.5	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-09 1/6
Date Analyzed:	05/08/18	Data File:	050808.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	119	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.46

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 11-W:1.0	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-10 1/6
Date Analyzed:	05/08/18	Data File:	050809.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	117	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.13

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 11-W:2.0	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/14/18	Lab ID:	805048-12 1/6
Date Analyzed:	05/15/18	Data File:	051534.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 11:0.5	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-13 1/600
Date Analyzed:	05/11/18	Data File:	051105.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84 d	50	150
DBC	100 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	5.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 11:1.0	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-14 1/6
Date Analyzed:	05/08/18	Data File:	050811.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	124	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.98

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 11:2.0	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/14/18	Lab ID:	805048-16 1/6
Date Analyzed:	05/15/18	Data File:	051535.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	110	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.22

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 11-E:0.5	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-17 1/6
Date Analyzed:	05/08/18	Data File:	050812.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	130	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 11-E: 1.0	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-18 1/6
Date Analyzed:	05/08/18	Data File:	050830.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.036

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 11-S:0.5	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-21 1/60
Date Analyzed:	05/11/18	Data File:	051106.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83 d	50	150
DBC	98 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 11-S:1.0	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-22 1/6
Date Analyzed:	05/08/18	Data File:	050832.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.47

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 11-S:2.0	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/14/18	Lab ID:	805048-24 1/6
Date Analyzed:	05/15/18	Data File:	051536.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 12:0.5	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-25 1/6
Date Analyzed:	05/08/18	Data File:	050833.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 12:1.0	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-26 1/6
Date Analyzed:	05/08/18	Data File:	050834.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	88	50	150
DBC	105	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.16

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 12:2.0	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/14/18	Lab ID:	805048-28 1/6
Date Analyzed:	05/15/18	Data File:	051537.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 12-E:0.5	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-29 1/6
Date Analyzed:	05/08/18	Data File:	050835.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	111	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.71

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 12-E: 1.0	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-30 1/6
Date Analyzed:	05/08/18	Data File:	050836.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.15

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 12-E:2.0	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/14/18	Lab ID:	805048-32 1/6
Date Analyzed:	05/15/18	Data File:	051538.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 12-W:0.5	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-33 1/60
Date Analyzed:	05/11/18	Data File:	051107.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	92 d	50	150
DBC	105 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 12-W:1.0	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-34 1/6
Date Analyzed:	05/08/18	Data File:	050838.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	108	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.073

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 12-W:1.5	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/14/18	Lab ID:	805048-35 1/6
Date Analyzed:	05/15/18	Data File:	051539.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 12-S:0.5	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-37 1/6
Date Analyzed:	05/08/18	Data File:	050839.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	115	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.30

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 12-S:1.0	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-38 1/6
Date Analyzed:	05/08/18	Data File:	050840.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	111	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.012

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 13-NE:0.5	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-41 1/6
Date Analyzed:	05/08/18	Data File:	050841.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 13-NE:1.0	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-42 1/6
Date Analyzed:	05/08/18	Data File:	050842.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 13-S:0.5	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-45 1/6
Date Analyzed:	05/08/18	Data File:	050843.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 13-S:1.0	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-46 1/6
Date Analyzed:	05/08/18	Data File:	050847.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	116	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.016

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 13:0.5	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-49 1/6
Date Analyzed:	05/08/18	Data File:	050848.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	105	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 13:1.0	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-50 1/6
Date Analyzed:	05/08/18	Data File:	050849.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 13-NW:0.5	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-53 1/6
Date Analyzed:	05/07/18	Data File:	050745.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 13-NW:1.0	Client:	Environmental Partners
Date Received:	05/03/18	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	805048-54 1/6
Date Analyzed:	05/07/18	Data File:	050746.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	08-974 mb 1/6
Date Analyzed:	05/08/18	Data File:	050805.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	92	50	150
DBC	109	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale, F&BI 805048
Date Extracted:	05/03/18	Lab ID:	08-971 mb2 1/6
Date Analyzed:	05/06/18	Data File:	050610.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale, F&BI 805048
Date Extracted:	05/14/18	Lab ID:	08-1046 mb 1/6
Date Analyzed:	05/15/18	Data File:	051517.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	89	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/21/18

Date Received: 05/03/18

Project: Brookdale, F&BI 805048

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 805024-42 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.13	126 b	128 b	50-150	2 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	102	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/21/18

Date Received: 05/03/18

Project: Brookdale, F&BI 805048

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 805048-04 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.21	112 b	117 b	50-150	4 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	112	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/21/18

Date Received: 05/03/18

Project: Brookdale, F&BI 805048

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804509-04 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	85	89	50-150	5

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	90	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/21/18

Date Received: 05/03/18

Project: Brookdale, F&BI 805048

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804450-20 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.13	89 b	108 b	50-150	19 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	100	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Report To 805 048
BEAL JOHNSON
 Company EPI
 Address 1180 NW MAPLE ST. SUITE 310
 City, State, ZIP ISSAQUAH, WA. 98027
 Phone (425) 395-0019 Email _____

SAMPLE CHAIN OF CUSTODY

MF 05-03-18 Page # 1 of 6

SAMPLERS (signature) [Signature]

PROJECT NAME

PO #

Brookdale

REMARKS

INVOICE TO

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days

☐ Archive Samples

☐ Other _____

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	PESTICIDES 80X			
GREEN 10:0.5	01	05/02/18	902	SOIL	1											ARCHIVE SAMPLES
GREEN 10:1.0	02		904													NOT MARKED
GREEN 10:1.5	03		905													FOR ANALYSIS
GREEN 10:2.0	04		925										X			◆ - per BJ
GREEN 10-NE:0.5	05		942										X			5/10/18 ME
GREEN 10-NE:1.0	06		945										X			
GREEN 10-NE:1.5	07		949													
GREEN 10-NE:2.0	08		1012										◆			
GREEN 11-W:0.5	09		1023										X			
GREEN 11-W:1.0	10		1025										X			

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	Joe Shum	EPI	5/3/18	0832
Received by: <u>[Signature]</u>	James Bruya	F&B	5/3	0832
Relinquished by:				
Received by:		Samples received at <u>2</u> °C		

805048

SAMPLE CHAIN OF CUSTODY

ME 05-02-18

Page # 2 of 6

Report To BEAU JOHNSONCompany EPIAddress 1180 NW MAPLE ST. SUITE 310City, State, ZIP ISSAQUAH, WA. 98027Phone (425) 395-0010 Email _____SAMPLERS (signature) [Signature]

PROJECT NAME

BROOKDALE

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	PTCINES 8067			
GREEN 11- W: 1.5	11	05/02/18	1028	SOIL	1											
GREEN 11- W: 2.0	12		1031		1								◆			
GREEN 11: 0.5	13		1042		1								X			
GREEN 11: 1.0	14		1044		1								X			
GREEN 11: 1.5	15		1045		1											
GREEN 11: 2.0	16		1048		1								◆			
GREEN 11- E: 0.5	17		1055		1								X			
GREEN 11- E: 1.0	18		1058		1								X			
GREEN 11- E: 1.5	19		1102		1											
GREEN 11- E: 2.0	20		1107		1											

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Joe Sheno's</u>	<u>EPI</u>	<u>5/3/18</u>	<u>0832</u>
Received by: <u>[Signature]</u>	<u>James Bruya</u>	<u>F&B</u>	<u>5/3</u>	<u>0832</u>
Relinquished by:				
Received by:				

SAMPLE CHAIN OF CUSTODY

ME 05-03-18 Page # 3 of 6

Report To 805048
BEAL JOHNSON
 Company EPI
 Address 1180 NW MAPLE ST. SUITE 310
 City, State, ZIP SEASIDE, WA - 98027
 Phone (425) 395-0010 Email _____

SAMPLERS (signature) <u>[Signature]</u>	
PROJECT NAME <u>BROOKDALE</u>	PO #
REMARKS	INVOICE TO

TURNAROUND TIME <input checked="" type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Archive Samples <input type="checkbox"/> Other
--	---

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 808			
GREEN 11-5:0.5	21	05/02/18	1116	SOIL	1								X			
GREEN 11-8:1.0	22		1118										X			
GREEN 11-8:1.5	23		1121													
GREEN 11-8:2.0	24		1122										◆			
GREEN 12:0.5	25		1222										X			
GREEN 12:1.0	26		1224										X			
GREEN 12:1.5	27		1226													
GREEN 12:2.0	28		1228										◆			
GREEN 12-E:0.5	29		1236										X			
GREEN 12-E:1.0	30		1238										X			

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	Joe Sherrod	EPI	5/3/18	0832
Received by: <u>[Signature]</u>	James Bruya	F&B	5/3	0830
Relinquished by:				
Received by:				

805048

SAMPLE CHAIN OF CUSTODY

ME 05-03-18

Page # 4 of 6

Report To Beau Johnson

Company EPI

Address 1180 NW Maple St.

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email beau@eepi-wa.com

SAMPLERS (signature)

PROJECT NAME

74001

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	PESTICIDES			
GREEN 12-E: 1.5	31	05/02/18	1239	SOIL	1											
GREEN 12-E: 2.0	32		1247										◆			
Green 12-W: 0.5	33		1253										X			
Green 12-W: 1.0	34		1255										X			
Green 12-W: 1.5	35		1258										◆			
Green 12-W: 2.0	36		1303													
GREEN 12-S: 0.5	37		1308										X			
GREEN 12-S: 1.0	38		1310										X			
GREEN 12-S: 1.5	39		1312													
GREEN 12-S: 2.0	40		1313													

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Received by:

Relinquished by:

Received by:

Joe Sheno

JAMES BRUYA

EPI

F&B

5/3/18

5/3

0832

0830

805048

SAMPLE CHAIN OF CUSTODY

Report To Beau Johnson

Company EPI

Address 1180 NW Maple St.

City, State, ZIP Issaquah, WA 98027

Phone 425-345-0060 Email beayj@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

74001

PO #

REMARKS

INVOICE TO

ME 05-03-18

Page # 5 of 6

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	PESTICIDES 8081			
Green 13-NE: 0.5	41	5/2/18	1327	Soil	1								X			
Green 13-NE: 1.0	42	1	1329	1	1								X			
Green 13-NE: 1.5	43		1330													
Green 13-NE: 2.0	44		1332													
GREEN 13-S: 0.5	45		1337										X			
GREEN 13-S: 1.0	46		1345										X			
Green 13-S: 1.5	47		1408													
Green 13-S: 2.0	48		1416													
GREEN 13: 0.5	45 49	5/2/18	1433										X			
GREEN 13: 1.0	50		1435										X			

Friedman & Bruya, Inc.

3012 16th Avenue West

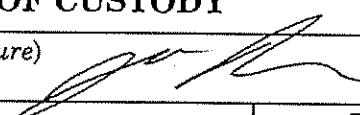
Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE		PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Joe - Skewes	EPI	5/3/18	0832
Received by:		JAMES BRUYA	FBI	5/3	0832
Relinquished by:					
Received by:					

SAMPLE CHAIN OF CUSTODY

Report To Beau Johnson
 Company FPI
 Address 1180 NW Maple St.
 City, State, ZIP Issaquah, WA 98027
 Phone 425-395-0010 Email beauj@fpi-wa.com

SAMPLERS (signature) 

ME 05-03-18 Page # 6 of 6

PROJECT NAME

74001

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL


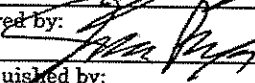
☐ Dispose after 30 days

☐ Archive Samples

☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	2017/10/01 2018			
GREEN 13: 1.5	51	05/02/18	1506	SOIL	1											
GREEN 13: 2.0	52	↓	1508	↓	↓											
GREEN 13-NW: 0.5	53	↓	1513	↓	↓								X			
GREEN 13-NW: 1.0	54	↓	1515	↓	↓								X			
GREEN 13-NW: 1.5	55	↓	1518	↓	↓											
GREEN 13-NW: 2.0	56	↓	1521	↓	↓											

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Joe Shew	FPI	5/3/18	0832
Received by: 	James Bruya	F#B	5/3	0832
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

May 23, 2018

Beau Johnson, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 805107

Dear Mr Johnson:

Included are the results from the testing of material submitted on May 7, 2018 from the Brookdale 74001, F&BI 805107 project. There are 35 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0523R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 7, 2018 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 805107 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
805107 -01	Green 14-N:0.5
805107 -02	Green 14-N:1.0
805107 -03	Green 14-N:1.5
805107 -04	Green 14-N:2.0
805107 -05	Green 14:0.5
805107 -06	Green 14:1.0
805107 -07	Green 14:1.5
805107 -08	Green 14:2.0
805107 -09	Green 14-E:0.5
805107 -10	Green 14-E:1.0
805107 -11	Green 14-E:1.5
805107 -12	Green 14-E:2.0
805107 -13	Green 14-W:0.5
805107 -14	Green 14-W:1.0
805107 -15	Green 14-W:1.5
805107 -16	Green 14-W:2.0
805107 -17	Green 15-S:0.5
805107 -18	Green 15-S:1.0
805107 -19	Green 15-S:1.5
805107 -20	Green 15-S:2.0
805107 -21	Green 15:0.5
805107 -22	Green 15:1.0
805107 -23	Green 15:1.5
805107 -24	Green 15:2.0
805107 -25	Green 15-NE:0.5
805107 -26	Green 15-NE:1.0
805107 -27	Green 15-NE:1.5
805107 -28	Green 15-NE:2.0
805107 -29	Green 15-W:0.5
805107 -30	Green 15-W:1.0
805107 -31	Green 15-W:1.5
805107 -32	Green 15-W:2.0
805107 -33	Green 16-NW:0.5
805107 -34	Green 16-NW:1.0
805107 -35	Green 16-NW:1.5
805107 -36	Green 16-NW:2.0
805107 -37	Green 16-SW:0.5
805107 -38	Green 16-SW:1.0
805107 -39	Green 16-SW:1.5
805107 -40	Green 16-SW:2.0
805107 -41	Green 16-E:0.5
805107 -42	Green 16-E:1.0
805107 -43	Green 16-E:1.5
805107 -44	Green 16-E:2.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 14-N:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/08/18	Lab ID:	805107-01 1/600
Date Analyzed:	05/11/18	Data File:	051110.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85 d	50	150
DBC	98 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	6.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 14-N:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/08/18	Lab ID:	805107-02 1/60
Date Analyzed:	05/11/18	Data File:	051111.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	92 d	50	150
DBC	107 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	2.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 14-N:2.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/15/18	Lab ID:	805107-04 1/6
Date Analyzed:	05/16/18	Data File:	051634.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.22

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 14:2.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/08/18	Lab ID:	805107-08 1/6
Date Analyzed:	05/09/18	Data File:	050932.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 14-E:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/08/18	Lab ID:	805107-09 1/6
Date Analyzed:	05/09/18	Data File:	050933.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 14-E:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/08/18	Lab ID:	805107-10 1/6
Date Analyzed:	05/09/18	Data File:	050934.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	106	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.37

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 14-E:2.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/15/18	Lab ID:	805107-12 1/6
Date Analyzed:	05/16/18	Data File:	051635.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 14-W:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/08/18	Lab ID:	805107-13 1/60
Date Analyzed:	05/11/18	Data File:	051112.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	88 d	50	150
DBC	100 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	2.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 14-W:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/08/18	Lab ID:	805107-14 1/6
Date Analyzed:	05/09/18	Data File:	050936.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.18

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 14-W:2.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/15/18	Lab ID:	805107-16 1/6
Date Analyzed:	05/16/18	Data File:	051636.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 15-S:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/08/18	Lab ID:	805107-17 1/600
Date Analyzed:	05/11/18	Data File:	051113.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86 d	50	150
DBC	95 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	5.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 15-S:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/08/18	Lab ID:	805107-18 1/6
Date Analyzed:	05/09/18	Data File:	050938.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	120	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.085

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 15-S:1.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/15/18	Lab ID:	805107-19 1/6
Date Analyzed:	05/16/18	Data File:	051637.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 15:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/08/18	Lab ID:	805107-21 1/6
Date Analyzed:	05/10/18	Data File:	050963.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 15:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/08/18	Lab ID:	805107-22 1/6
Date Analyzed:	05/10/18	Data File:	050964.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 15-NE:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/08/18	Lab ID:	805107-25 1/6
Date Analyzed:	05/10/18	Data File:	050965.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 15-NE:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/08/18	Lab ID:	805107-26 1/6
Date Analyzed:	05/10/18	Data File:	050966.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 15-W:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/08/18	Lab ID:	805107-29 1/6
Date Analyzed:	05/10/18	Data File:	050967.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 15-W:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/08/18	Lab ID:	805107-30 1/6
Date Analyzed:	05/10/18	Data File:	050968.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	117	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.062

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 16-NW:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/08/18	Lab ID:	805107-33 1/6
Date Analyzed:	05/09/18	Data File:	050939.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	110	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.48

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 16-NW:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/08/18	Lab ID:	805107-34 1/6
Date Analyzed:	05/09/18	Data File:	050940.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.012

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 16-SW:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/08/18	Lab ID:	805107-37 1/6
Date Analyzed:	05/09/18	Data File:	050941.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.27

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 16-SW:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/08/18	Lab ID:	805107-38 1/6
Date Analyzed:	05/09/18	Data File:	050942.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	132	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.24

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 16-SW:2.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/15/18	Lab ID:	805107-40 1/6
Date Analyzed:	05/16/18	Data File:	051638.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.031

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 16-E:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/08/18	Lab ID:	805107-41 1/6
Date Analyzed:	05/09/18	Data File:	050943.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	108	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 16-E:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/08/18	Lab ID:	805107-42 1/60
Date Analyzed:	05/11/18	Data File:	051114.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	90 d	50	150
DBC	105 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 16-E:2.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/15/18	Lab ID:	805107-44 1/6
Date Analyzed:	05/16/18	Data File:	051639.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.014

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/09/18	Lab ID:	08-1028 mb 1/6
Date Analyzed:	05/09/18	Data File:	050954.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	92	50	150
DBC	111	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/08/18	Lab ID:	08-988 mb 1/6
Date Analyzed:	05/09/18	Data File:	050906.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	98	50	150
DBC	114	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 805107
Date Extracted:	05/15/18	Lab ID:	08-1070 mb 1/6
Date Analyzed:	05/16/18	Data File:	051633.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	90	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/23/18

Date Received: 05/07/18

Project: Brookdale 74001, F&BI 805107

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 805108-04 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	89	90	50-150	1

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	94	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/23/18

Date Received: 05/07/18

Project: Brookdale 74001, F&BI 805107

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 804509-04 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	85	89	50-150	5

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	90	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/23/18

Date Received: 05/07/18

Project: Brookdale 74001, F&BI 805107

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 805107-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	3.7	181 b	102 b	50-150	56 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	98	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

805107

SAMPLE CHAIN OF CUSTODY

ME 05-07-18 1 of 505

Report To Beau Johnson
 Company EPI
 Address 1180 NW maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPI

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081			
Green 14-N: 0.5	-01	5/3/18	0855	Soil	1								X			Archive all samples not marked for immediate analysis.
Green 14-N: 1.0	-02		0856		1								X			
Green 14-N: 1.5	-03		0858		1											
Green 14-N: 2.0	-04		0905		1											
Green 14-N: 0.5	-05		0911		1											Archive only
Green 14-N: 1.0	-06		0913		1											Archive only
Green 14-N: 1.5	-07		0915		1											
Green 14-N: 2.0	-08		0931		1								X			
Green 14-E: 0.5	-09		0942		1								X			
Green 14-E: 1.0	-10		0944		1								X			Samples received at 2°C

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	Beau Johnson	EPI	5-7-18	0750
Received by: <u>[Signature]</u>	Michael Erdich	FEB	↓	↓
Relinquished by:				
Received by:				

805107

SAMPLE CHAIN OF CUSTODY

ME

05-07-18

Page # 2 of 5 COS

Report To Beau JohnsonCompany EPIAddress 1180 NW Maple St Suite 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPI

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081			
Green 14-E: 1.5	-11	5/3/18	0947	Soil	1											# Archive all samples not marked for immediate analysis.
Green 14-E: 2.0	-12		0948		1											
Green 14-W: 0.5	-13		0954		1								X			
Green 14-W: 1.0	-14		1001		1								X			
Green 14-W: 1.5	-15		1005		1											
Green 14-W: 2.0	-16		1011		1											
Green 15-S: 0.5	-17		1023		1								X			
Green 15-S: 1.0	-18		1025		1								X			
Green 15-S: 1.5	-19		1027		1											
Green 15-S: 2.0	-20		1028		1											

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by:	<u>[Signature]</u>		<u>Beau Johnson</u>		<u>EPI</u>	<u>5-7-18</u>	<u>0750</u>
Received by:	<u>[Signature]</u>		<u>Michael Erdahl</u>		<u>Pharm</u>	<u>↓</u>	<u>↓</u>
Relinquished by:							
Received by:							

805107

SAMPLE CHAIN OF CUSTODY

ME 05-07-18 Page # 3 of 505

Report To Beau Johnson
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0016 - Email beauj@epi-wa.com

SAMPLERS (signature)

Betsy Wang

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPI

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	8081	Pesticides			
Green IS: 0.5	-21		1033										◆				Archive all samples not marked for immediate analysis.
Green IS: 1.0	-22		1035										◆				
Green IS: 1.5	-23		1044														
Green IS: 2.0	-24		1052														◆ per BT 5/7/16
Green IS NE: 0.5	-25		1056										◆				ME
Green IS-NE: 1.0	-26		1100										◆				
Green IS-NE: 1.5	-27		1125														
Green IS-NE: 2.0	-28		1136														
Green IS-W: 0.5	-29		1246										◆				
Green IS-W: 1.0	-30		1254										◆				

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Beau John</u>	<u>EPI</u>	<u>5-7-18</u>	<u>0750</u>
Received by: <u>[Signature]</u>	<u>Michael Edell</u>	<u>FBI</u>	<u>↓</u>	<u>↓</u>
Relinquished by:				
Received by:				

805707

SAMPLE CHAIN OF CUSTODY

ME 05-07-18 Page # 4 of 3 COS

Report To Beau Johnson
Company EPI
Address 1180 NW Maple St, Suite 310
City, State, ZIP Issaquah, WA 98027
Phone (425) 395-0010 Email beauj@epi-wa.com



SAMPLERS (signature) <u>Betsy Wing</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001</u>
REMARKS	INVOICE TO <u>EPI</u>

TURNAROUND TIME
☒ Standard Turnaround
☐ RUSH
Rush charges authorized by: _____

SAMPLE DISPOSAL
☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

						ANALYSES REQUESTED												Notes
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081					
Green 15-W:1.5	-31	5/3/18	1256	Soil	1													# Archive all samples not marked for immediate analysis.
Green 15-W:2.0	-32		1300		1													
Green 15-NW:0.5	-33		1313		1								X					
Green 16-NW:1.0	-34		1317		1								X					
Green 16-NW:1.5	-35		1322		1													
Green 16-NW:2.0	-36		1326		1													
Green 16-SW:0.5	-37		1334		1								X					
Green 16-SW:1.0	-38		1345		1								X					
Green 16-SW:1.5	-39		1414		1													
Green 16-SW:2.0	-40		1430		1													

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE		PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Beau Johnson	EPI	5-7-18	CSD
Received by:		Michael Erdahl	F&B	↓	↓
Relinquished by:					
Received by:					

005107

SAMPLE CHAIN OF CUSTODY

ME

05-07-18

5

of 505

Report To Beau JohnsonCompany EPIAddress 1180 NW Maple St, Suite 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email beauj@epi-wa.com

SAMPLERS (signature)

Betsy King

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPI

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

						ANALYSES REQUESTED												Notes	
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pesticides 8081						
GREEN 16-E:0.5	-41	05/03/18	1436	SOIL	1								X					4 Archive all samples not marked for immediate anal.	
GREEN 16-E:1.0	-42	↓	1446	↓									X						
GREEN 16-E:1.5	-43	↓	1448	↓															
GREEN 16-E:2.0	-44	↓	1449	↓									◆						

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Beau Johnson</u>	<u>EPI</u>	<u>5-7-18</u>	<u>0750</u>
Received by: <u>[Signature]</u>	<u>Michael Ehlert</u>	<u>F&B</u>	<u>↓</u>	<u>↓</u>
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
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fbi@isomedia.com
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May 23, 2018

Beau Johnson, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale, F&BI 805108

Dear Mr Johnson:

Included are the results from the testing of material submitted on May 7, 2018 from the Brookdale, F&BI 805108 project. There are 30 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0523R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 7, 2018 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale, F&BI 805108 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
805108 -01	Green 17-SW:0.5
805108 -02	Green 17-SW:1.0
805108 -03	Green 17-SW:1.5
805108 -04	Green 17-SW:2.0
805108 -05	Green 17:0.5
805108 -06	Green 17:1.0
805108 -07	Green 17:1.5
805108 -08	Green 17:2.0
805108 -09	Green 17-E:0.5
805108 -10	Green 17-E:1.0
805108 -11	Green 17-E:1.5
805108 -12	Green 17-E:2.0
805108 -13	Green 17-NW:0.5
805108 -14	Green 17-NW:1.0
805108 -15	Green 17-NW:1.5
805108 -16	Green 17-NW:2.0
805108 -17	Green 18:0.5
805108 -18	Green 18:1.0
805108 -19	Green 18:2.0
805108 -20	Green 18-S:0.5
805108 -21	Green 18-S:1.0
805108 -22	Green 18-S:1.5
805108 -23	Green 18-S:2.0
805108 -24	Green 18-NW:0.5
805108 -25	Green 18-NW:1.0
805108 -26	Green 18-NW:1.5
805108 -27	Green 18-NW:2.0
805108 -28	Green 18-NE:0.5
805108 -29	Green 18-NE:1.0
805108 -30	Green 18-NE:1.5
805108 -31	Green 18-NE:2.0
805108 -32	PG 1-S:0.5
805108 -33	PG 1-S:1.0
805108 -34	PG 1-S:1.5
805108 -35	PG 1-NW:0.5
805108 -36	PG 1-NW:1.0
805108 -37	PG 1-NW:1.5
805108 -38	PG 1-NW:2.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 17-SW:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/07/18	Lab ID:	805108-01 1/6
Date Analyzed:	05/09/18	Data File:	050861.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.58

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 17-SW:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/07/18	Lab ID:	805108-02 1/6
Date Analyzed:	05/08/18	Data File:	050850.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.15

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 17-SW:2.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/15/18	Lab ID:	805108-04 1/6
Date Analyzed:	05/16/18	Data File:	051648.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 17:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/07/18	Lab ID:	805108-05 1/600
Date Analyzed:	05/11/18	Data File:	051108.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83 d	50	150
DBC	94 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	9.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 17:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/07/18	Lab ID:	805108-06 1/6
Date Analyzed:	05/08/18	Data File:	050852.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	108	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.35

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 17:2.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/15/18	Lab ID:	805108-08 1/6
Date Analyzed:	05/16/18	Data File:	051640.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.24

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 17-E:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/07/18	Lab ID:	805108-09 1/6
Date Analyzed:	05/08/18	Data File:	050853.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	111	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.43

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 17-E:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/07/18	Lab ID:	805108-10 1/6
Date Analyzed:	05/08/18	Data File:	050854.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	106	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.14

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 17-E:2.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/15/18	Lab ID:	805108-12 1/6
Date Analyzed:	05/16/18	Data File:	051641.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 17-NW:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/07/18	Lab ID:	805108-13 1/6
Date Analyzed:	05/08/18	Data File:	050855.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	105	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.15

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 17-NW:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/07/18	Lab ID:	805108-14 1/6
Date Analyzed:	05/08/18	Data File:	050856.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	105	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.057

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 18:2.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/07/18	Lab ID:	805108-19 1/6
Date Analyzed:	05/08/18	Data File:	050857.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.19

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 18-S:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/07/18	Lab ID:	805108-20 1/6
Date Analyzed:	05/09/18	Data File:	050858.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	108	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.16

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 18-S:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/07/18	Lab ID:	805108-21 1/6
Date Analyzed:	05/09/18	Data File:	050859.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.024

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 18-NW:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/07/18	Lab ID:	805108-24 1/60
Date Analyzed:	05/11/18	Data File:	051109.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86 d	50	150
DBC	99 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 18-NW:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/07/18	Lab ID:	805108-25 1/6
Date Analyzed:	05/09/18	Data File:	050947.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	116	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.31

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 18-NW:2.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/15/18	Lab ID:	805108-27 1/6
Date Analyzed:	05/16/18	Data File:	051642.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.23

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 18-NE:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/07/18	Lab ID:	805108-28 1/6
Date Analyzed:	05/09/18	Data File:	050945.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.39

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Green 18-NE:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/07/18	Lab ID:	805108-29 1/6
Date Analyzed:	05/09/18	Data File:	050946.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	PG 1-S:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/07/18	Lab ID:	805108-32 1/6
Date Analyzed:	05/09/18	Data File:	050949.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.61

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	PG 1-S:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/07/18	Lab ID:	805108-33 1/6
Date Analyzed:	05/09/18	Data File:	050950.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	PG 1-S:1.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/15/18	Lab ID:	805108-34 1/6
Date Analyzed:	05/16/18	Data File:	051643.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.090

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	PG 1-NW:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/07/18	Lab ID:	805108-35 1/6
Date Analyzed:	05/09/18	Data File:	050951.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.036

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	PG 1-NW:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	Brookdale, F&BI 805108
Date Extracted:	05/07/18	Lab ID:	805108-36 1/6
Date Analyzed:	05/09/18	Data File:	050952.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale, F&BI 805108
Date Extracted:	05/07/18	Lab ID:	08-986 mb 1/6
Date Analyzed:	05/08/18	Data File:	050846.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale, F&BI 805108
Date Extracted:	05/15/18	Lab ID:	08-1070 mb 1/6
Date Analyzed:	05/16/18	Data File:	051633.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	90	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/23/18

Date Received: 05/07/18

Project: Brookdale, F&BI 805108

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 805108-04 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	89	90	50-150	1

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	94	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/23/18

Date Received: 05/07/18

Project: Brookdale, F&BI 805108

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 805108-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.44	104 b	61 b	50-150	52 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	94	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

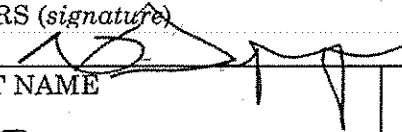
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

805108

SAMPLE CHAIN OF CUSTODY

ME 05/07/18

COS

Report To BEAR JOHNSONCompany EPIAddress 1180 NW MAPLE ST. SUITE 310City, State, ZIP SEASQUAH, WA. 98027Phone (425) 395-0010 Email _____SAMPLERS (signature) 

PROJECT NAME

BROOKDALE

PO #

REMARKS

INVOICE TO

Page # 1 of 4

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other _____

						ANALYSES REQUESTED												Notes
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	PESTICIDES 8081					
GREEN 17-SW: 0.5	01	05/04/18	815	SOIL	1								X					ARCHIVE SAMPLES
GREEN 17-SW: 1.0	02		817										X					NOT MARKED FOR ANALYSIS
GREEN 17-SW: 1.5	03		821															
GREEN 17-SW: 2.0	04		823										◆					◆ pr BT
GREEN 17 SW : 0.5	05		832										X					5/15/18 ME
GREEN 17 SW : 1.0	06		835										X					
GREEN 17 SW : 1.5	07		838															
GREEN 17 SW : 2.0	08		850										◆					
GREEN 17-E: 0.5	09		900										X					Samples received at 2 °C
GREEN 17-E: 1.0	10		905										X					

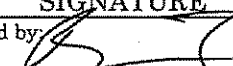
Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Relinquished by: Received by: 

Relinquished by:

Received by:

PRINT NAME

Bear Johnson

Michael Erdahl

COMPANY

EPI

F&B

DATE

5-7-18
TIME	0756		
	↓	↓	

805108

SAMPLE CHAIN OF CUSTODY ME 05/07/18

COS 4

Report To BEAN JOHNSONCompany EPIAddress 1180 NW MAPLE ST. SUITE 310City, State, ZIP ISSAQUAH, WA 98027Phone (425) 395-0010 Email _____SAMPLERS (signature) 

PROJECT NAME

BROOKDALE

PO #

REMARKS

INVOICE TO

Page # 2 of 4

TURNAROUND TIME

☐ Standard Turnaround☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other _____

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	PESTICIDES 8081			
GREEN 17-E: 1.5	11	05/04/18	915	SOIL	1											
GREEN 17-E: 2.0	12		925										◆			
GREEN 17-NW: 0.5	13		939										X			
GREEN 17-NW: 1.0	14		945										X			
GREEN 17-NW: 1.5	15		1006													
GREEN 17-NW: 2.0	16		1013													
GREEN 18: 0.5	17		1033													
GREEN 18: 1.0	18		1037													
GREEN 18: 2.0	19		1053										X			
GREEN 18-S: 0.5	20		1108										X			

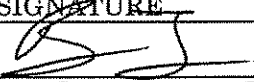
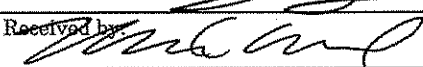
Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Relinquished by: Received by: 

Relinquished by: _____

Received by: _____

PRINT NAME

Bear Johnson

Michael Erdahl

COMPANY

EPI

F&B Inc

DATE

5-7-18

↓

TIME

0750

↓

Samples received at 2 °C

805109

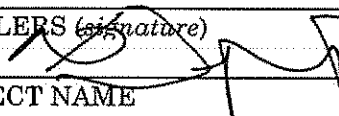
SAMPLE CHAIN OF CUSTODY

ME 05/07/18

COS 4

Report To Beau JohnsonCompany EPIAddress 1180 NW Maple St, Suite 310City, State, ZIP Issaquah, WA 98027

Phone _____ Email _____

SAMPLERS (signature) 

PROJECT NAME

BROOKDALE

PO #

REMARKS

INVOICE TO

Page # 3 of 4

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other _____

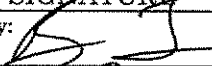
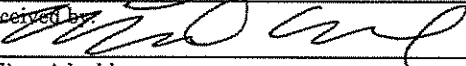
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Particulates 804			
GREEN 18-5:1.0	21	05/07/18	1111	SOIL	1								X			
GREEN 18-5:1.5	22		1118													
GREEN 18-5:2.0	23		1145													
GREEN 18-NW: 0.5	24		1239										X			
GREEN 18-NW: 1.0	25		1242										X			
GREEN 18-NW: 1.5	26		1243													
GREEN 18-NW: 2.0	27		1246													
GREEN 18-NE: 0.5	28		1300										X			
GREEN 18-NE: 1.0	29		1301										X			
GREEN 18-NE: 1.5	30		1306													

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Beau Johnson	EPI	5-7-18	0750
Received by: 	Michael Erdahl	F&B Inc	↓	↓
Relinquished by:				
Received by:		Samples received at	20C	

905108

SAMPLE CHAIN OF CUSTODY

ME 05/07/18

C05

Report To BEAN JOHNSONCompany EPIAddress 1180 NW MAPLE ST. SUITE 310City, State, ZIP ISSAQUAH, WA. 98027Phone (425) 375-0010 Email

SAMPLERS (signature)

Page # 4 of 4

PROJECT NAME

PO #

BROOKDALE

REMARKS

INVOICE TO

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ OtherChange "PG"
samples to "PG 1"

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	PESTICIDES 8081			
GREEN 18-NE: 2.0	31	05/04/18	1311	SOIL	1											
PG-S: 0.5	32		1323										X			
PG-S: 1.0	33		1329										X			
PG-S: 1.5	34		1334										◆			
PG-NW: 0.5	35		1421										X			
PG-NW: 1.0	36		1422										X			
PG-NW: 1.5	37		1428													
PG-NW: 2.0	38		1440													

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Received by:

Relinquished by:

Received by:

Bean JohnMichael ErdichEPIFRB Inc5-7-18↓0750↓Samples received at 2 °C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

May 23, 2018

Beau Johnson, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 74001 Brookdale, F&BI 805114

Dear Mr Johnson:

Included are the results from the testing of material submitted on May 7, 2018 from the 74001 Brookdale, F&BI 805114 project. There are 26 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0523R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 7, 2018 by Friedman & Bruya, Inc. from the Environmental Partners 74001 Brookdale, F&BI 805114 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
805114 -01	PG 1-E:0.5
805114 -02	PG 1-E:1.0
805114 -03	PG 1-E:1.5
805114 -04	PG 1-E:2.0
805114 -05	PG 1:0.5
805114 -06	PG 1:1.0
805114 -07	PG 1:1.5
805114 -08	PG 1:2.0
805114 -09	PG 2:0.5
805114 -10	PG 2:1.0
805114 -11	PG 2-NW:0.5
805114 -12	PG 2-NW:1.0
805114 -13	PG 2-NW:1.5
805114 -14	PG 2-NW:2.0
805114 -15	TEE 4-C:0.5
805114 -16	TEE 4-C:1.0
805114 -17	TEE 4-C:1.5
805114 -18	TEE 4-C:2.0
805114 -19	TEE 4-S:0.5
805114 -20	TEE 4-S:1.0
805114 -21	PG 2:1.5
805114 -22	PG 2:2.0
805114 -23	PG 2-S:0.5
805114 -24	PG 2-S:1.0
805114 -25	PG 2-S:1.5
805114 -26	PG 2-S:2.0
805114 -27	PG 2-NE:0.5
805114 -28	PG 2-NE:1.0
805114 -29	PG 2-NE:1.5
805114 -30	PG 2-NE:2.0
805114 -31	TEE 4-S:1.5
805114 -32	TEE 4-S:2.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	PG 1-E:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	74001 Brookdale, F&BI 805114
Date Extracted:	05/08/18	Lab ID:	805114-01 1/6
Date Analyzed:	05/11/18	Data File:	051126.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.38

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	PG 1-E:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	74001 Brookdale, F&BI 805114
Date Extracted:	05/08/18	Lab ID:	805114-02 1/6
Date Analyzed:	05/11/18	Data File:	051127.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.055

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	PG 1:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	74001 Brookdale, F&BI 805114
Date Extracted:	05/08/18	Lab ID:	805114-05 1/60
Date Analyzed:	05/15/18	Data File:	051518.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	97 d	50	150
DBC	115 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	2.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	PG 1:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	74001 Brookdale, F&BI 805114
Date Extracted:	05/08/18	Lab ID:	805114-06 1/6
Date Analyzed:	05/11/18	Data File:	051129.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	PG 1:2.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	74001 Brookdale, F&BI 805114
Date Extracted:	05/15/18	Lab ID:	805114-08 1/6
Date Analyzed:	05/16/18	Data File:	051644.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	57	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.080

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	PG 2:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	74001 Brookdale, F&BI 805114
Date Extracted:	05/08/18	Lab ID:	805114-09 1/6
Date Analyzed:	05/11/18	Data File:	051130.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.74

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	PG 2:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	74001 Brookdale, F&BI 805114
Date Extracted:	05/08/18	Lab ID:	805114-10 1/6
Date Analyzed:	05/11/18	Data File:	051131.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.081

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	PG 2-NW:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	74001 Brookdale, F&BI 805114
Date Extracted:	05/08/18	Lab ID:	805114-11 1/600
Date Analyzed:	05/15/18	Data File:	051519.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86 d	50	150
DBC	99 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	20

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	PG 2-NW:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	74001 Brookdale, F&BI 805114
Date Extracted:	05/08/18	Lab ID:	805114-12 1/6
Date Analyzed:	05/11/18	Data File:	051133.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.14

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	PG 2-NW:2.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	74001 Brookdale, F&BI 805114
Date Extracted:	05/15/18	Lab ID:	805114-14 1/6
Date Analyzed:	05/16/18	Data File:	051645.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.40

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE 4-C:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	74001 Brookdale, F&BI 805114
Date Extracted:	05/08/18	Lab ID:	805114-15 1/6
Date Analyzed:	05/11/18	Data File:	051134.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE 4-C:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	74001 Brookdale, F&BI 805114
Date Extracted:	05/08/18	Lab ID:	805114-16 1/6
Date Analyzed:	05/11/18	Data File:	051135.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE 4-S:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	74001 Brookdale, F&BI 805114
Date Extracted:	05/08/18	Lab ID:	805114-19 1/6
Date Analyzed:	05/11/18	Data File:	051136.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.023

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	TEE 4-S:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	74001 Brookdale, F&BI 805114
Date Extracted:	05/08/18	Lab ID:	805114-20 1/6
Date Analyzed:	05/11/18	Data File:	051137.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.013

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	PG 2:2.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	74001 Brookdale, F&BI 805114
Date Extracted:	05/15/18	Lab ID:	805114-22 1/6
Date Analyzed:	05/16/18	Data File:	051646.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.41

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	PG 2-S:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	74001 Brookdale, F&BI 805114
Date Extracted:	05/08/18	Lab ID:	805114-23 1/6
Date Analyzed:	05/11/18	Data File:	051138.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	109	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.19

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	PG 2-S:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	74001 Brookdale, F&BI 805114
Date Extracted:	05/08/18	Lab ID:	805114-24 1/6
Date Analyzed:	05/11/18	Data File:	051139.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.034

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	PG 2-NE:0.5	Client:	Environmental Partners
Date Received:	05/07/18	Project:	74001 Brookdale, F&BI 805114
Date Extracted:	05/08/18	Lab ID:	805114-27 1/60
Date Analyzed:	05/15/18	Data File:	051520.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	108 d	50	150
DBC	122 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	3.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	PG 2-NE:1.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	74001 Brookdale, F&BI 805114
Date Extracted:	05/08/18	Lab ID:	805114-28 1/6
Date Analyzed:	05/11/18	Data File:	051141.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.76

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	PG 2-NE:2.0	Client:	Environmental Partners
Date Received:	05/07/18	Project:	74001 Brookdale, F&BI 805114
Date Extracted:	05/15/18	Lab ID:	805114-30 1/6
Date Analyzed:	05/16/18	Data File:	051647.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001 Brookdale, F&BI 805114
Date Extracted:	05/08/18	Lab ID:	08-1025 mb 1/6
Date Analyzed:	05/11/18	Data File:	051125.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	89	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001 Brookdale, F&BI 805114
Date Extracted:	05/15/18	Lab ID:	08-1070 mb 1/6
Date Analyzed:	05/16/18	Data File:	051633.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	90	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/23/18

Date Received: 05/07/18

Project: 74001 Brookdale, F&BI 805114

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 805108-04 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	89	90	50-150	1

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	94	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/23/18

Date Received: 05/07/18

Project: 74001 Brookdale, F&BI 805114

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 705114-11 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	4.9	0 b	0 b	50-150	0 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	88	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

Report To Beau Johnson
 Company EPI
 Address 480 NW Maple St.
 City, State, ZIP Issaquah, WA 98027
 Phone 425-395-0060 Email beauj@epi-wa.com

SAMPLERS (signature) [Signature]

PROJECT NAME

74001

ME 05-07-18

Page # 1 of 4

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☐ Archive Samples

☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	PETROL 8081			
PG1-E:0.5	01	05/07/18	820	SOIL	1								X			ARCHIVE SAMPLES
PG1-E:1.0	02		822										X			NOT CHECKED FOR ANALYSIS
PG1-E:1.5	03		826													◆ - per BT
PG1-E:2.0	04		835										◆	No M4 5/15/18		5/15/18 ME
PG1:0.5	05		844										X			
PG1:1.0	06		848										X			
PG1:1.5	07		856													
PG1:2.0	08		904										◆			
PG2:0.5	09		919										X			
PG2:1.0	10		921										X			

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>N. LINSPERGER</u>	<u>EPI</u>	<u>05/07/18</u>	<u>1405</u>
Received by: <u>[Signature]</u>	<u>Elizabeth Webber By</u>	<u>FBI</u>	<u>05/17/18</u>	<u>1405</u>
Relinquished by:				
Received by:				
		Samples received at <u>5</u> °C		

805114

SAMPLE CHAIN OF CUSTODY

Report To Beau JohnsonCompany EPIAddress 1180 NW Maple StCity, State, ZIP 1180 NW Maple StPhone 425-385-0060 Email beauj@epi-ux.comSAMPLERS (signature) [Signature]

ME 05-07-18

Page # 2 of 4PROJECT NAME X4001

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	7037/6105388			
PG 2-NW: 0.5	11	05/07/18	1011	SOIL	1								X			
PG 2-NW: 1.0	12		1013										X			
PG 2-NW: 1.5	13		1016													
PG 2-NW: 2.0	14		1020													
TEE 4-C: 0.5	15		1152										X			
TEE 4-C: 1.0	16		1155										X			
TEE 4-C: 1.5	17		1202													
TEE 4-C: 2.0	18		1210													
TEE 4-S: 0.5	19		1215										X			
TEE 4-S: 1.0	20		1223										X			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>N. HINSPIENGER</u>	<u>EPI</u>	<u>05/07/18</u>	<u>1405</u>
Received by: <u>[Signature]</u>	<u>Elizabeth Weber-Bry</u>	<u>FBI</u>	<u>5/7/18</u>	<u>1405</u>
Relinquished by:				
Received by:				

SAMPLE CHAIN OF CUSTODY

Report To Beau Johnson
 Company EPI
 Address 4180 NW Maple St.
 City, State, ZIP Issaquah, WA 98027
 Phone 425-395-0000 Email beauj@epi-wa.com

SAMPLERS (signature) [Signature]

PROJECT NAME

74001

PO #

REMARKS

INVOICE TO

ME 05-07-18 3 cos 4
 Page # 3 of 4

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☐ Archive Samples

☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	PESTICIDES 8061			
PG 2 : 1.5	21	05/07/18	923	Soil	1											
PG 2 : 2.0	22		926													
PG 2 - S : 0.5	23		932													
PG 2 - S : 1.0	24		938													
PG 2 - S : 1.5	25		944													
PG 2 - S : 2.0	26		950													
PG 2 - NE : 0.5	27		958													
PG 2 - NE : 1.0	28		1001													
PG 2 - NE : 1.5	29		1003													
PG 2 - NE : 2.0	30		1005													

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	N. HINSPENGGK	EPI	05/07/18	1405
Received by: <u>[Signature]</u>	Elizabeth Webber	FBI	5/7/18	1405
Relinquished by:				
Received by:				

805114

SAMPLE CHAIN OF CUSTODY

Report To BEAL JOHNSONCompany EPIAddress 1180 NW MAPLE ST. Suite 310City, State, ZIP ISSAQUAH, WA 98022Phone (425) 395-0810 Email _____SAMPLERS (signature) [Signature]

PROJECT NAME

BROOKDOLE

PO #

REMARKS

INVOICE TO

ME 05-07-18 4 COS 4

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other _____

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	PESTICIDES 8281			
TEE 4-5: 1-5	31	05/07/18	1231	SOIL	1											
TEE 4-5: 2-0	32	↓	1233	↓	↓											

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>N. HINSBERGER</u>	<u>EPI</u>	<u>05/07/18</u>	<u>1405</u>
Received by: <u>[Signature]</u>	<u>Elizabeth Walker-Bruya</u>	<u>FBI</u>	<u>5/7/18</u>	<u>1405</u>
Relinquished by:				
Received by:				

Attachment C
2020 TRC Laboratory Analytical Results

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

February 4, 2020

Charles McFadden, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 015397, F&BI 001156

Dear Mr McFadden:

Included is the amended report from the testing of material submitted on January 13, 2020 from the 015397, F&BI 001156 project. Per your request, the dieldrin results were reported to the method detection limit.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Thom Morin
TRC0117R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

January 17, 2020

Charles McFadden, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 015397, F&BI 001156

Dear Mr McFadden:

Included are the results from the testing of material submitted on January 13, 2020 from the 015397, F&BI 001156 project. There are 20 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Thom Morin
TRC0117R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on January 13, 2020 by Friedman & Bruya, Inc. from the Environmental Partners 015397, F&BI 001156 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
001156-01	NFCC-Sed-1
001156-02	NFCC-Sed-1:1
001156-03	NFCC-Sed-2
001156-04	NFCC-Sed-2:1
001156-05	NFCC-Sed-3
001156-06	NFCC-Sed-3:1
001156-07	CC-Sed-1
001156-08	CC-Sed-1:1

Samples NFCC-Sed-1, NFCC-Sed-2, NFCC-Sed-3, and CC-Sed-1 were sent to Fremont Analytical for nitrate, phosphate, and organophosphorus pesticide diazinon analyses. The report is enclosed.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	NFCC-Sed-1	Client:	Environmental Partners
Date Received:	01/13/20	Project:	015397, F&BI 001156
Date Extracted:	01/14/20	Lab ID:	001156-01
Date Analyzed:	01/14/20	Data File:	001156-01.046
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	3.08
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	NFCC-Sed-2	Client:	Environmental Partners
Date Received:	01/13/20	Project:	015397, F&BI 001156
Date Extracted:	01/14/20	Lab ID:	001156-03
Date Analyzed:	01/14/20	Data File:	001156-03.047
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	3.33
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	NFCC-Sed-3	Client:	Environmental Partners
Date Received:	01/13/20	Project:	015397, F&BI 001156
Date Extracted:	01/14/20	Lab ID:	001156-05
Date Analyzed:	01/14/20	Data File:	001156-05.050
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	4.62
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	CC-Sed-1	Client:	Environmental Partners
Date Received:	01/13/20	Project:	015397, F&BI 001156
Date Extracted:	01/14/20	Lab ID:	001156-07
Date Analyzed:	01/14/20	Data File:	001156-07.051
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	4.10
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015397, F&BI 001156
Date Extracted:	01/14/20	Lab ID:	I0-028 mb
Date Analyzed:	01/14/20	Data File:	I0-028 mb.044
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	NFCC-Sed-1	Client:	Environmental Partners
Date Received:	01/13/20	Project:	015397, F&BI 001156
Date Extracted:	01/14/20	Lab ID:	001156-01
Date Analyzed:	01/14/20	Data File:	011421.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	50	150
Toluene-d8	91	50	150
4-Bromofluorobenzene	126	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	NFCC-Sed-2	Client:	Environmental Partners
Date Received:	01/13/20	Project:	015397, F&BI 001156
Date Extracted:	01/14/20	Lab ID:	001156-03
Date Analyzed:	01/15/20	Data File:	011509.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	118	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	95	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	NFCC-Sed-3	Client:	Environmental Partners
Date Received:	01/13/20	Project:	015397, F&BI 001156
Date Extracted:	01/14/20	Lab ID:	001156-05
Date Analyzed:	01/14/20	Data File:	011424.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	113	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	CC-Sed-1	Client:	Environmental Partners
Date Received:	01/13/20	Project:	015397, F&BI 001156
Date Extracted:	01/14/20	Lab ID:	001156-07
Date Analyzed:	01/14/20	Data File:	011425.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	95	50	150
4-Bromofluorobenzene	120	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015397, F&BI 001156
Date Extracted:	01/14/20	Lab ID:	00-090 mb
Date Analyzed:	01/14/20	Data File:	011420.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	101	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	NFCC-Sed-1	Client:	Environmental Partners
Date Received:	01/13/20	Project:	015397, F&BI 001156
Date Extracted:	01/14/20	Lab ID:	001156-01 1/6
Date Analyzed:	01/14/20	Data File:	011407.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	70	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.006

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	NFCC-Sed-2	Client:	Environmental Partners
Date Received:	01/13/20	Project:	015397, F&BI 001156
Date Extracted:	01/14/20	Lab ID:	001156-03 1/6
Date Analyzed:	01/14/20	Data File:	011410.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	66	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.006

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	NFCC-Sed-3	Client:	Environmental Partners
Date Received:	01/13/20	Project:	015397, F&BI 001156
Date Extracted:	01/14/20	Lab ID:	001156-05 1/6
Date Analyzed:	01/14/20	Data File:	011411.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	66	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.006

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	CC-Sed-1	Client:	Environmental Partners
Date Received:	01/13/20	Project:	015397, F&BI 001156
Date Extracted:	01/14/20	Lab ID:	001156-07 1/6
Date Analyzed:	01/14/20	Data File:	011412.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	66	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.006

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015397, F&BI 001156
Date Extracted:	01/14/20	Lab ID:	00-122 mb 1/6
Date Analyzed:	01/14/20	Data File:	011405.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.006

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/17/20

Date Received: 01/13/20

Project: 015397, F&BI 001156

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 001156-03 x5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	<5	84	85	75-125	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	92	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/17/20

Date Received: 01/13/20

Project: 015397, F&BI 001156

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260D DIRECT SPARGE**

Laboratory Code: 001156-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet wt)	Duplicate Result (Wet wt)	RPD (Limit 20)
1,2-Dibromoethane (EDB)	mg/kg (ppm)	<0.005	<0.005	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
1,2-Dibromoethane (EDB)	mg/kg (ppm)	0.05	113	111	70-130	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/17/20

Date Received: 01/13/20

Project: 015397, F&BI 001156

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 001156-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	66	64	50-150	3

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	82	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



Fremont
Analytical

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Friedman & Bruya

Michael Erdahl
3012 16th Ave. W.
Seattle, WA 98119

RE: 001156

Work Order Number: 2001205

January 15, 2020

Attention Michael Erdahl:

Fremont Analytical, Inc. received 8 sample(s) on 1/13/2020 for the analyses presented in the following report.

Ion Chromatography by EPA Method 300.0

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample Moisture (Percent Moisture)

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

CC:
Eric Young

CLIENT: Friedman & Bruya
Project: 001156
Work Order: 2001205

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2001205-001	NFCC-Sed-1	01/13/2020 8:30 AM	01/13/2020 4:33 PM
2001205-002	NFCC-Sed-1:1	01/13/2020 9:00 AM	01/13/2020 4:33 PM
2001205-003	NFCC-Sed-2	01/13/2020 9:30 AM	01/13/2020 4:33 PM
2001205-004	NFCC-Sed-2:1	01/13/2020 9:35 AM	01/13/2020 4:33 PM
2001205-005	NFCC-Sed-3	01/13/2020 10:25 AM	01/13/2020 4:33 PM
2001205-006	NFCC-Sed-3:1	01/13/2020 10:35 AM	01/13/2020 4:33 PM
2001205-007	CC-Sed-1	01/13/2020 11:55 AM	01/13/2020 4:33 PM
2001205-008	CC-Sed-1:1	01/13/2020 12:05 PM	01/13/2020 4:33 PM

CLIENT: Friedman & Bruya
Project: 001156

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 2001205

Date Reported: 1/15/2020

Client: Friedman & Bruya

Collection Date: 1/13/2020 8:30:00 AM

Project: 001156

Lab ID: 2001205-001

Matrix: Soil

Client Sample ID: NFCC-Sed-1

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27114

Analyst: SB

Diazinon	ND	82.0		µg/Kg-dry	1	1/14/2020 10:05:40 PM
Surr: Triphenylphosphate	68.0	10.7 - 154		%Rec	1	1/14/2020 10:05:40 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27121

Analyst: SS

Nitrate (as N)	2.51	1.77		mg/Kg-dry	1	1/15/2020 12:20:00 PM
Orthophosphate (as P)	ND	3.53		mg/Kg-dry	1	1/15/2020 12:20:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R56603

Analyst: MM

Percent Moisture	43.5	0.500		wt%	1	1/14/2020 8:22:08 AM
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Analytical Report

Work Order: 2001205

Date Reported: 1/15/2020

Client: Friedman & Bruya

Collection Date: 1/13/2020 9:30:00 AM

Project: 001156

Lab ID: 2001205-003

Matrix: Soil

Client Sample ID: NFCC-Sed-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27114

Analyst: SB

Diazinon	ND	696	D	µg/Kg-dry	10	1/15/2020 2:24:19 PM
Surr: Triphenylphosphate	77.1	10.7 - 154	D	%Rec	10	1/15/2020 2:24:19 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27121

Analyst: SS

Nitrate (as N)	4.32	1.54		mg/Kg-dry	1	1/15/2020 12:43:00 PM
Orthophosphate (as P)	ND	3.09		mg/Kg-dry	1	1/15/2020 12:43:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R56603

Analyst: MM

Percent Moisture	35.3	0.500		wt%	1	1/14/2020 8:22:08 AM
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Analytical Report

Work Order: 2001205

Date Reported: 1/15/2020

Client: Friedman & Bruya

Collection Date: 1/13/2020 10:25:00 AM

Project: 001156

Lab ID: 2001205-005

Matrix: Soil

Client Sample ID: NFCC-Sed-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27114

Analyst: SB

Diazinon	ND	65.7		µg/Kg-dry	1	1/14/2020 11:57:37 PM
Surr: Triphenylphosphate	67.1	10.7 - 154		%Rec	1	1/14/2020 11:57:37 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27121

Analyst: SS

Nitrate (as N)	2.88	1.52		mg/Kg-dry	1	1/15/2020 1:06:00 PM
Orthophosphate (as P)	ND	3.04		mg/Kg-dry	1	1/15/2020 1:06:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R56603

Analyst: MM

Percent Moisture	34.2	0.500		wt%	1	1/14/2020 8:22:08 AM
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Analytical Report

Work Order: 2001205

Date Reported: 1/15/2020

Client: Friedman & Bruya

Collection Date: 1/13/2020 11:55:00 AM

Project: 001156

Lab ID: 2001205-007

Matrix: Soil

Client Sample ID: CC-Sed-1

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27114

Analyst: SB

Diazinon	ND	85.2		µg/Kg-dry	1	1/15/2020 12:20:05 AM
Surr: Triphenylphosphate	40.8	10.7 - 154		%Rec	1	1/15/2020 12:20:05 AM

Ion Chromatography by EPA Method 300.0

Batch ID: 27121

Analyst: SS

Nitrate (as N)	ND	1.96		mg/Kg-dry	1	1/15/2020 1:29:00 PM
Orthophosphate (as P)	ND	3.91		mg/Kg-dry	1	1/15/2020 1:29:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R56603

Analyst: MM

Percent Moisture	49.5	0.500		wt%	1	1/14/2020 8:22:08 AM
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Work Order: 2001205
CLIENT: Friedman & Bruya
Project: 001156

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: MB-27121		SampType: MBLK			Units: mg/Kg		Prep Date: 1/14/2020			RunNo: 56674		
Client ID: MBLKS		Batch ID: 27121			Analysis Date: 1/15/2020					SeqNo: 1128921		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	ND	1.00									
Orthophosphate (as P)	ND	2.00									

Sample ID: LCS-27121		SampType: LCS			Units: mg/Kg		Prep Date: 1/14/2020			RunNo: 56674		
Client ID: LCSS		Batch ID: 27121			Analysis Date: 1/15/2020			SeqNo: 1128922				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	7.33	1.00	7.500	0	97.7	90	110				
Orthophosphate (as P)	12.2	2.00	12.50	0	98.0	90	110				



Date: 1/15/2020

Work Order: 2001205
CLIENT: Friedman & Bruya
Project: 001156

QC SUMMARY REPORT
Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: MB-27114	SampType: MBLK	Units: µg/Kg		Prep Date: 1/14/2020	RunNo: 56650
Client ID: MBLKS	Batch ID: 27114	Analysis Date: 1/14/2020		SeqNo: 1128470	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Diazinon	ND	50.0									
Surr: Triphenylphosphate	21.4		20.00		107	10.7	154				

Sample ID: LCS-27114	SampType: LCS	Units: µg/Kg		Prep Date: 1/14/2020	RunNo: 56650
Client ID: LCSS	Batch ID: 27114	Analysis Date: 1/14/2020		SeqNo: 1128471	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Diazinon	15.4	50.0	20.00	0	77.2	37.1	132				
Surr: Triphenylphosphate	21.6		20.00		108	10.7	154				

Sample ID: 2001205-001ADUP	SampType: DUP	Units: µg/Kg-dry		Prep Date: 1/14/2020	RunNo: 56650
Client ID: NFCC-Sed-1	Batch ID: 27114	Analysis Date: 1/14/2020		SeqNo: 1128473	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Diazinon	ND	80.5						0	0	30	
Surr: Triphenylphosphate	21.1		32.22		65.6	10.7	154		0		

Sample ID: 2001205-001AMS	SampType: MS	Units: µg/Kg-dry		Prep Date: 1/14/2020	RunNo: 56650
Client ID: NFCC-Sed-1	Batch ID: 27114	Analysis Date: 1/14/2020		SeqNo: 1128474	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Diazinon	15.5	82.5	33.00	0	47.1	9.74	142				
Surr: Triphenylphosphate	26.0		33.00		78.7	10.7	154				

Sample ID: 2001205-001AMSD	SampType: MSD	Units: µg/Kg-dry		Prep Date: 1/14/2020	RunNo: 56650
Client ID: NFCC-Sed-1	Batch ID: 27114	Analysis Date: 1/15/2020		SeqNo: 1128883	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Diazinon	13.1	755	30.18	0	0	9.74	142	15.54	200	30	DS
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Original

Work Order: 2001205

CLIENT: Friedman & Bruya

Project: 001156

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: 2001205-001AMSD	SampType: MSD	Units: µg/Kg-dry			Prep Date: 1/14/2020			RunNo: 56650			
Client ID: NFCC-Sed-1	Batch ID: 27114	Analysis Date: 1/15/2020						SeqNo: 1128883			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Surr: Triphenylphosphate	22.5		30.18		74.5	10.7	154		0		D
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NOTES:

S - Outlying spike recovery(ies) observed.

Client Name: **FB**
 Logged by: **Carissa True**

Work Order Number: **2001205**
 Date Received: **1/13/2020 4:33:00 PM**

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
 2. How was the sample delivered? FedEx

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
 4. Shipping container/cooler in good condition? Yes ☒ No ☐
 5. Custody Seals present on shipping container/cooler?
 (Refer to comments for Custody Seals not intact) Yes ☐ No ☒ Not Required ☐
 6. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
 7. Were all items received at a temperature of $>0^{\circ}\text{C}$ to 10.0°C * Yes ☒ No ☐ NA ☐
 8. Sample(s) in proper container(s)? Yes ☒ No ☐
 9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
 10. Are samples properly preserved? Yes ☒ No ☐
 11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
 12. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
 13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
 14. Does paperwork match bottle labels? Yes ☒ No ☐
 15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
 16. Is it clear what analyses were requested? Yes ☒ No ☐
 17. Were all holding times able to be met? Yes ☒ No ☐

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:

Item Information

Item #	Temp °C
Cooler 1	5.6
Sample 1	5.6

* Note: DoD/ELAP and TNI require items to be received at $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

2001205

Send Report To Michael Erdahl
 Company Friedman and Bruya, Inc.
 Address 3012 16th Ave W
 City, State, ZIP Seattle, WA 98119
 Phone # (206) 285-8282 Fax # (206) 283-5044

SUBCONTRACTER <u>Fram +</u>	
PROJECT NAME/NO. <u>001156</u>	PO # <u>A-526</u>
REMARKS Please Email Results	

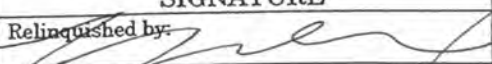
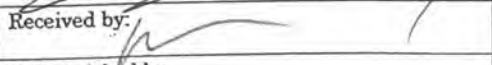
Page # 1 of 1

TURNAROUND TIME
☐ Standard (2 Weeks)
☒ RUSH 24 hr
 Rush charges authorized by: me

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED										Notes
						Dioxins/Furans	EPH	VPH	Nitrate	Phosphate	Diatoms					
NFCC-Sed-1		1/13/20	0830	So.1	1				x	x	x					
NFCC-Sed-1:1			0900		1											- Hold
NFCC-Sed-2			0930		1				x	x	x					
NFCC-Sed-2:1			0935		1											- Hold
NFCC-Sed-3			1025		1				x	x	x					
NFCC-Sed-3:1			1035		1											- Hold
CC-Sed-1			1155		1				x	x	x					
CC-Sed-1:1			1245		1											- Hold

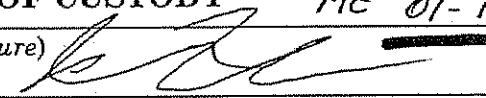
Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Michael Erdahl	Friedman & Bruya	1/13/20	1445
Received by: 	Eva Becker-Mayer	FM	1/13/20	1633
Relinquished by:				
Received by:				

001156

SAMPLE CHAIN OF CUSTODY

ME 01-13-20

VS2/A03
1 of 1Report To Charles McFadden / Thom MorinCompany TRCAddress 1180 NW Maple St.City, State, ZIP Issaquah, WA 98027Phone 425-395-0006 Email CMcfadden@trccompanies.comSAMPLERS (signature) 

PROJECT NAME

Brookdale

PO #

015397

REMARKS

INVOICE TO

TRC

TURNAROUND TIME

☐ Standard turnaround☒ RUSH 24 Hr

Rush charges authorized by:

Thom Morin

SAMPLE DISPOSAL

☐ Archive samples☐ Other

Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Ultrates/ Phosphates	As	Ethylene Dibromide (EDB)	Picazone + Dieldrin	
NFCC-Sed-1	01 A-F	1/13/20	0830	Sediment	6								X	X	X	X	
NFCC-Sed-1:1	02		0900										X	X	X	X	Hold JS
NFCC-Sed-2	03		0930										X	X	X	X	
NFCC-Sed-2:1	04		0935										X	X	X	X	Hold JS
NFCC-Sed-3	05		1025										X	X	X	X	
NFCC-Sed-3:1	06		1035										X	X	X	X	Hold JS
CC-Sed-1	07		1155										X	X	X	X	
CC-Sed-1:1	08		1205										X	X	X	X	Hold JS

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Relinquished by:

Received by:

Relinquished by:

Received by:

PRINT NAME

Joe ShumWham Phan

COMPANY

TRCFe BT

DATE

1/13/201/13/20

TIME

14271427Samples received at 4 °C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

February 4, 2020

Charles McFadden, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 015397, F&BI 001157

Dear Mr McFadden:

Included is the amended report from the testing of material submitted on January 13, 2020 from the 015397, F&BI 001157 project. Per your request, the results were reported down to the method detection limit.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Thom Morin
TRC0117R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

January 17, 2020

Charles McFadden, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 015397, F&BI 001157

Dear Mr McFadden:

Included are the results from the testing of material submitted on January 13, 2020 from the 015397, F&BI 001157 project. There are 19 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Thom Morin
TRC0117R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on January 13, 2020 by Friedman & Bruya, Inc. from the Environmental Partners 015397, F&BI 001157 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
001157 -01	NFCC-SW-1
001157 -02	NFCC-SW-2
001157 -03	CC-SW-1

The samples were sent to Fremont Analytical for nitrate, phosphate, and organophosphorus pesticide diazinon analyses. The report is enclosed.

The dissolved metals samples were filtered at Friedman and Bruya on January 14, 2020 at 15:05. The data were flagged accordingly.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	NFCC-SW-1 f	Client:	Environmental Partners
Date Received:	01/13/20	Project:	015397, F&BI 001157
Date Extracted:	01/14/20	Lab ID:	001157-01
Date Analyzed:	01/14/20	Data File:	001157-01.083
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	NFCC-SW-2 f	Client:	Environmental Partners
Date Received:	01/13/20	Project:	015397, F&BI 001157
Date Extracted:	01/14/20	Lab ID:	001157-02
Date Analyzed:	01/14/20	Data File:	001157-02.084
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	CC-SW-1 f	Client:	Environmental Partners
Date Received:	01/13/20	Project:	015397, F&BI 001157
Date Extracted:	01/14/20	Lab ID:	001157-03
Date Analyzed:	01/14/20	Data File:	001157-03.085
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	Method Blank f	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015397, F&BI 001157
Date Extracted:	01/14/20	Lab ID:	I0-030 mb
Date Analyzed:	01/14/20	Data File:	I0-030 mb.080
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	NFCC-SW-1	Client:	Environmental Partners
Date Received:	01/13/20	Project:	015397, F&BI 001157
Date Extracted:	01/14/20	Lab ID:	001157-01
Date Analyzed:	01/14/20	Data File:	001157-01.056
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	NFCC-SW-2	Client:	Environmental Partners
Date Received:	01/13/20	Project:	015397, F&BI 001157
Date Extracted:	01/14/20	Lab ID:	001157-02
Date Analyzed:	01/14/20	Data File:	001157-02.059
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	CC-SW-1	Client:	Environmental Partners
Date Received:	01/13/20	Project:	015397, F&BI 001157
Date Extracted:	01/14/20	Lab ID:	001157-03
Date Analyzed:	01/14/20	Data File:	001157-03.060
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015397, F&BI 001157
Date Extracted:	01/14/20	Lab ID:	I0-029 mb
Date Analyzed:	01/14/20	Data File:	I0-029 mb.054
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	NFCC-SW-1	Client:	Environmental Partners
Date Received:	01/13/20	Project:	015397, F&BI 001157
Date Extracted:	01/14/20	Lab ID:	001157-01
Date Analyzed:	01/14/20	Data File:	011417.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	51	50	150
DBC	77	50	150

Compounds:	Concentration ug/L
Dieldrin	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	NFCC-SW-2	Client:	Environmental Partners
Date Received:	01/13/20	Project:	015397, F&BI 001157
Date Extracted:	01/14/20	Lab ID:	001157-02
Date Analyzed:	01/14/20	Data File:	011418.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	50	50	150
DBC	75	50	150

Compounds:	Concentration ug/L
Dieldrin	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	CC-SW-1	Client:	Environmental Partners
Date Received:	01/13/20	Project:	015397, F&BI 001157
Date Extracted:	01/14/20	Lab ID:	001157-03
Date Analyzed:	01/14/20	Data File:	011419.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	48 ip	50	150
DBC	64	50	150

Compounds:	Concentration ug/L
Dieldrin	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015397, F&BI 001157
Date Extracted:	01/14/20	Lab ID:	00-123 mb
Date Analyzed:	01/14/20	Data File:	011414.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	49 ip	50	150
DBC	74	50	150

Compounds:	Concentration ug/L
Dieldrin	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/17/20
Date Received: 01/13/20
Project: 015397, F&BI 001157
Date Extracted: 01/14/20
Date Analyzed: 01/14/20

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR 1,2-DIBROMOETHANE BY EPA METHOD 8011 MODIFIED**

Results Reported as µg/L (ppb)

<u>Sample ID</u>	<u>EDB</u>
Laboratory ID	
NFCC-SW-1 001157-01	<0.01
NFCC-SW-2 001157-02	<0.01
CC-SW-1 001157-03	<0.01
Method Blank	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/17/20

Date Received: 01/13/20

Project: 015397, F&BI 001157

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR DISSOLVED METALS USING EPA METHOD 6020B**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	99	99	80-120	0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/17/20

Date Received: 01/13/20

Project: 015397, F&BI 001157

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 001157-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	<1	105	105	75-125	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	101	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/17/20

Date Received: 01/13/20

Project: 015397, F&BI 001157

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	ug/L (ppb)	0.5	75	77	70-130	3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/17/20

Date Received: 01/13/20

Project: 015397, F&BI 001157

**QUALITY ASSURANCE RESULTS
FROM THE ANALYSIS OF WATER SAMPLES FOR
1,2-DIBROMOETHANE BY EPA METHOD 8011 MODIFIED**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	Percent	Acceptance Criteria	RPD (Limit 10)
			Recovery LCS	Recovery LCSD		
1,2-Dibromoethane	ug/L (ppb)	0.10	90	98	70-130	9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



Fremont
Analytical

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info@fremontanalytical.com

Friedman & Bruya

Michael Erdahl

3012 16th Ave. W.

Seattle, WA 98119

RE: 001157

Work Order Number: 2001204

January 15, 2020

Attention Michael Erdahl:

Fremont Analytical, Inc. received 3 sample(s) on 1/13/2020 for the analyses presented in the following report.

Ion Chromatography by EPA Method 300.0

Organophosphorus Pesticides by EPA Method 8270-SIM

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

CC:

Eric Young



Date: 01/15/2020

CLIENT: Friedman & Bruya
Project: 001157
Work Order: 2001204

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2001204-001	NFCC-SW-1	01/13/2020 8:17 AM	01/13/2020 4:34 PM
2001204-002	NFCC-SW-2	01/13/2020 10:15 AM	01/13/2020 4:34 PM
2001204-003	CC-SW-1	01/13/2020 11:45 AM	01/13/2020 4:34 PM

CLIENT: Friedman & Bruya
Project: 001157

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 2001204
Date Reported: 1/15/2020

CLIENT: Friedman & Bruya
Project: 001157

Lab ID: 2001204-001

Client Sample ID: NFCC-SW-1

Collection Date: 1/13/2020 8:17:00 AM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27125

Analyst: SB

Diazinon	ND	0.197		µg/L	1	1/15/2020 11:46:30 AM
Surr: Triphenylphosphate	88.3	10 - 132		%Rec	1	1/15/2020 11:46:30 AM

Ion Chromatography by EPA Method 300.0

Batch ID: 27109

Analyst: SS

Nitrate (as N)	1.13	0.100		mg/L	1	1/13/2020 7:22:00 PM
Ortho-Phosphate (as P)	ND	0.200		mg/L	1	1/13/2020 7:22:00 PM

Lab ID: 2001204-002

Client Sample ID: NFCC-SW-2

Collection Date: 1/13/2020 10:15:00 AM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27125

Analyst: SB

Diazinon	ND	0.197		µg/L	1	1/15/2020 12:31:32 PM
Surr: Triphenylphosphate	102	10 - 132		%Rec	1	1/15/2020 12:31:32 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27109

Analyst: SS

Nitrate (as N)	1.14	0.100		mg/L	1	1/13/2020 8:08:00 PM
Ortho-Phosphate (as P)	ND	0.200		mg/L	1	1/13/2020 8:08:00 PM



Analytical Report

Work Order: 2001204
Date Reported: 1/15/2020

CLIENT: Friedman & Bruya
Project: 001157

Lab ID: 2001204-003

Client Sample ID: CC-SW-1

Collection Date: 1/13/2020 11:45:00 AM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27125

Analyst: SB

Diazinon	ND	0.199		µg/L	1	1/15/2020 12:54:02 PM
Surr: Triphenylphosphate	87.9	10 - 132		%Rec	1	1/15/2020 12:54:02 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27109

Analyst: SS

Nitrate (as N)	2.69	0.200	D	mg/L	2	1/14/2020 10:46:00 AM
Ortho-Phosphate (as P)	ND	0.200		mg/L	1	1/13/2020 9:17:00 PM



Date: 1/15/2020

Work Order: 2001204
CLIENT: Friedman & Bruya
Project: 001157

QC SUMMARY REPORT
Ion Chromatography by EPA Method 300.0

Sample ID: MB-27109	SampType: MBLK	Units: mg/L		Prep Date: 1/13/2020	RunNo: 56652
Client ID: MBLKW	Batch ID: 27109	Analysis Date: 1/13/2020		SeqNo: 1128564	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrate (as N)	ND	0.100
Ortho-Phosphate (as P)	ND	0.200

Sample ID: LCS-27109	SampType: LCS	Units: mg/L		Prep Date: 1/13/2020	RunNo: 56652
Client ID: LCSW	Batch ID: 27109	Analysis Date: 1/13/2020		SeqNo: 1128565	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrate (as N)	0.729	0.100	0.7500	0	97.2	90	110
Ortho-Phosphate (as P)	1.29	0.200	1.250	0	103	90	110

Sample ID: 2001204-001ADUP	SampType: DUP	Units: mg/L		Prep Date: 1/13/2020	RunNo: 56652
Client ID: NFCC-SW-1	Batch ID: 27109	Analysis Date: 1/13/2020		SeqNo: 1128567	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrate (as N)	1.08	0.100				1.133	4.98	20
Ortho-Phosphate (as P)	ND	0.200				0		20

Sample ID: 2001204-002AMS	SampType: MS	Units: mg/L		Prep Date: 1/13/2020	RunNo: 56652
Client ID: NFCC-SW-2	Batch ID: 27109	Analysis Date: 1/13/2020		SeqNo: 1128569	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrate (as N)	1.93	0.100	0.7500	1.136	106	80	120
Ortho-Phosphate (as P)	1.07	0.200	1.250	0	85.7	80	120

Sample ID: 2001204-002AMSD	SampType: MSD	Units: mg/L		Prep Date: 1/13/2020	RunNo: 56652
Client ID: NFCC-SW-2	Batch ID: 27109	Analysis Date: 1/13/2020		SeqNo: 1128570	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrate (as N)	1.98	0.100	0.7500	1.136	112	80	120	1.930	2.30	20
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Original



Date: 1/15/2020

Work Order: 2001204
CLIENT: Friedman & Bruya
Project: 001157

QC SUMMARY REPORT
Ion Chromatography by EPA Method 300.0

Sample ID: 2001204-002AMSD	SampType: MSD	Units: mg/L				Prep Date: 1/13/2020			RunNo: 56652		
Client ID: NFCC-SW-2	Batch ID: 27109	Analysis Date: 1/13/2020							SeqNo: 1128570		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ortho-Phosphate (as P)	1.19	0.200	1.250	0	95.4	80	120	1.071	10.8	20	



Date: 1/15/2020

Work Order: 2001204
 CLIENT: Friedman & Bruya
 Project: 001157

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: MB-27125		SampType: MBLK			Units: µg/L		Prep Date: 1/14/2020			RunNo: 56666		
Client ID: MBLKW		Batch ID: 27125			Analysis Date: 1/15/2020					SeqNo: 1128788		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	0.199									
Surr: Triphenylphosphate	0.334		0.3987		83.7	10	132				

Sample ID: LCS-27125		SampType: LCS			Units: µg/L		Prep Date: 1/14/2020			RunNo: 56666		
Client ID: LCSW		Batch ID: 27125			Analysis Date: 1/15/2020			SeqNo: 1128789				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	1.49	0.199	1.994	0	75.0	26.5	127				
Surr: Triphenylphosphate	0.334		0.3989		83.7	10	132				

Sample ID: LCSD-27125		SampType: LCSD			Units: µg/L		Prep Date: 1/14/2020			RunNo: 56666		
Client ID: LCSW02		Batch ID: 27125			Analysis Date: 1/15/2020					SeqNo: 1128790		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	1.56	0.199	1.987	0	78.4	26.5	127	1.495	4.18	30	
Surr: Triphenylphosphate	0.341		0.3974		85.8	10	132		0		

Sample ID: 2001204-001BDUP		SampType: DUP			Units: µg/L		Prep Date: 1/14/2020			RunNo: 56666		
Client ID: NFCC-SW-1		Batch ID: 27125			Analysis Date: 1/15/2020					SeqNo: 1128792		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	0.231						0		30	
Surr: Triphenylphosphate	0.440		0.4611		95.3	10	132		0		

Client Name: **FB**
 Logged by: **Carissa True**

Work Order Number: **2001204**
 Date Received: **1/13/2020 4:34:00 PM**

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
 2. How was the sample delivered? FedEx

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
 4. Shipping container/cooler in good condition? Yes ☒ No ☐
 5. Custody Seals present on shipping container/cooler?
 (Refer to comments for Custody Seals not intact) Yes ☐ No ☒ Not Required ☐
 6. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
 7. Were all items received at a temperature of $>0^{\circ}\text{C}$ to 10.0°C * Yes ☒ No ☐ NA ☐
 8. Sample(s) in proper container(s)? Yes ☒ No ☐
 9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
 10. Are samples properly preserved? Yes ☒ No ☐
 11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
 12. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
 13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
 14. Does paperwork match bottle labels? Yes ☒ No ☐
 15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
 16. Is it clear what analyses were requested? Yes ☒ No ☐
 17. Were all holding times able to be met? Yes ☒ No ☐

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:

Item Information

Item #	Temp °C
Cooler 1	5.6
Sample 1	5.6

* Note: DoD/ELAP and TNI require items to be received at $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$

2001204

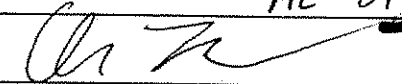
634

001157

SAMPLE CHAIN OF CUSTODY

ME 01-13-20

vwa/AOS/1/AOS

Report To C. McFadden cc T. MorinCompany TRCAddress 1180 NW Maple St Ste B10City, State, ZIP Issaquah, Wa, 98027Phone 425-395-0010 Email C.McFadden@TRCcompanies.comSAMPLERS (signature) Page # 1 of 1

PROJECT NAME

PO #

015397 Brookdale

015397

REMARKS

INVOICE TO

Ichigo USA

Project specific RLs? - Yes / No

Co., LTD

TURNAROUND TIME

☐ Standard turnaround☒ RUSH 24 TAT

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Archive samples☐ Other

Default: Dispose after 30 days


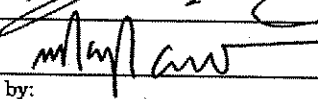
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Nitrates/Phosphates	As (total + dissolved)	Ethylene Glycol	Dibromide (EDB)	
NFCC-SW-1	01 A-H	1/13/20	0817	Water	8								X	X	X	X	
NFCC-SW-2	02 ✓	1/13/20	1015	Water	8								X	X	X	X	
CC-SW-1	03 ✓	1/13/20	1145	Water	8								X	X	X	X	

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Joe Shewell	TRC	1/13/20	1427
Received by: 	Nhan Phan	FEBI	1/13/20	1427
Relinquished by:				
Received by:		Samples received at	4 °C	

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

February 4, 2020

Charles McFadden, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 015379, F&BI 001178

Dear Mr McFadden:

Included is the amended report from the testing of material submitted on January 14, 2020 from the 015379, F&BI 001178 project. Per your request, the samples were reported down to the method detection limit.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Thom Morin
TRC0117R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

January 17, 2020

Charles McFadden, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 015379, F&BI 001178

Dear Mr McFadden:

Included are the results from the testing of material submitted on January 14, 2020 from the 015379, F&BI 001178 project. There are 16 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Thom Morin
TRC0117R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on January 14, 2020 by Friedman & Bruya, Inc. from the Environmental Partners 015379, F&BI 001178 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
001178 -01	CC-SW-2
001178 -02	Pond-SW

The samples were sent to Fremont Analytical for nitrate, phosphate, and organophosphorus pesticide diazinon analyses. The report is enclosed.

The dissolved metals samples were filtered at Friedman and Bruya on January 15, 2020 at 09:42. The data were flagged accordingly.

The 8081 method blank surrogate failed below the acceptance criteria. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	CC-SW-2	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001178
Date Extracted:	01/15/20	Lab ID:	001178-01
Date Analyzed:	01/15/20	Data File:	001178-01.048
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Pond-SW	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001178
Date Extracted:	01/15/20	Lab ID:	001178-02
Date Analyzed:	01/15/20	Data File:	001178-02.049
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015379, F&BI 001178
Date Extracted:	01/15/20	Lab ID:	I0-029 mb2
Date Analyzed:	01/15/20	Data File:	I0-029 mb2.047
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	CC-SW-2 f	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001178
Date Extracted:	01/15/20	Lab ID:	001178-01
Date Analyzed:	01/15/20	Data File:	001178-01.045
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	Pond-SW f	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001178
Date Extracted:	01/15/20	Lab ID:	001178-02
Date Analyzed:	01/15/20	Data File:	001178-02.046
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	Method Blank f	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015379, F&BI 001178
Date Extracted:	01/15/20	Lab ID:	I0-030 mb2
Date Analyzed:	01/15/20	Data File:	I0-030 mb2.044
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	CC-SW-2	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001178
Date Extracted:	01/14/20	Lab ID:	001178-01
Date Analyzed:	01/15/20	Data File:	011505.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	47 ip	50	150
DBC	82	50	150

Compounds:	Concentration ug/L
Dieldrin	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Pond-SW	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001178
Date Extracted:	01/14/20	Lab ID:	001178-02
Date Analyzed:	01/15/20	Data File:	011506.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	49 ip	50	150
DBC	62	50	150

Compounds:	Concentration ug/L
Dieldrin	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015379, F&BI 001178
Date Extracted:	01/14/20	Lab ID:	00-123 mb
Date Analyzed:	01/14/20	Data File:	011414.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	49 vo	50	150
DBC	74	50	150

Compounds:	Concentration ug/L
Dieldrin	<0.02 js

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/17/20

Date Received: 01/14/20

Project: 015379, F&BI 001178

Date Extracted: 01/15/20

Date Analyzed: 01/15/20

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR 1,2-DIBROMOETHANE BY EPA METHOD 8011 MODIFIED**

Results Reported as µg/L (ppb)

Sample ID

EDB

Laboratory ID

CC-SW-2

<0.01

001178-01

Pond-SW

<0.01

001178-02

Method Blank

<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/17/20

Date Received: 01/14/20

Project: 015379, F&BI 001178

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 001157-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	<1	105	105	75-125	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	101	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/17/20

Date Received: 01/14/20

Project: 015379, F&BI 001178

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR DISSOLVED METALS USING EPA METHOD 6020B**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	99	99	80-120	0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/17/20

Date Received: 01/14/20

Project: 015379, F&BI 001178

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	ug/L (ppb)	0.5	75	77	70-130	3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/17/20

Date Received: 01/14/20

Project: 015379, F&BI 001178

**QUALITY ASSURANCE RESULTS
FROM THE ANALYSIS OF WATER SAMPLES FOR
1,2-DIBROMOETHANE BY EPA METHOD 8011 MODIFIED**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	Percent	Acceptance Criteria	RPD (Limit 10)
			Recovery LCS	Recovery LCSD		
1,2-Dibromoethane	ug/L (ppb)	0.10	90	98	70-130	9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



Fremont
Analytical

3600 Fremont Ave. N.

Seattle, WA 98103

T: (206) 352-3790

F: (206) 352-7178

info@fremontanalytical.com

Friedman & Bruya

Michael Erdahl

3012 16th Ave. W.

Seattle, WA 98119

RE: 001178

Work Order Number: 2001223

January 16, 2020

Attention Michael Erdahl:

Fremont Analytical, Inc. received 2 sample(s) on 1/14/2020 for the analyses presented in the following report.

Ion Chromatography by EPA Method 300.0

Organophosphorus Pesticides by EPA Method 8270-SIM

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

DoD/ELAP Certification #L17-135, ISO/IEC 17025:2005
ORELAP Certification: WA 100009-007 (NELAP Recognized)



Date: 01/16/2020

CLIENT: Friedman & Bruya
Project: 001178
Work Order: 2001223

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2001223-001	CC-SW-2	01/14/2020 10:25 AM	01/14/2020 3:35 PM
2001223-002	Pond-SW	01/14/2020 11:50 AM	01/14/2020 3:35 PM

CLIENT: Friedman & Bruya
Project: 001178

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 2001223

Date Reported: 1/16/2020

Client: Friedman & Bruya

Collection Date: 1/14/2020 10:25:00 AM

Project: 001178

Lab ID: 2001223-001

Matrix: Water

Client Sample ID: CC-SW-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27125

Analyst: SB

Diazinon	ND	0.198		µg/L	1	1/15/2020 1:16:36 PM
Surr: Triphenylphosphate	80.8	10 - 132		%Rec	1	1/15/2020 1:16:36 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27141

Analyst: SS

Nitrate (as N)	2.84	0.200	D	mg/L	2	1/16/2020 10:53:00 AM
Ortho-Phosphate (as P)	ND	0.200		mg/L	1	1/15/2020 8:02:00 PM



Analytical Report

Work Order: 2001223

Date Reported: 1/16/2020

Client: Friedman & Bruya

Collection Date: 1/14/2020 11:50:00 AM

Project: 001178

Lab ID: 2001223-002

Matrix: Water

Client Sample ID: Pond-SW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27125

Analyst: SB

Diazinon	ND	0.199		µg/L	1	1/15/2020 1:39:14 PM
Surr: Triphenylphosphate	99.9	10 - 132		%Rec	1	1/15/2020 1:39:14 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27141

Analyst: SS

Nitrate (as N)	0.993	0.100		mg/L	1	1/15/2020 8:48:00 PM
Ortho-Phosphate (as P)	ND	0.200		mg/L	1	1/15/2020 8:48:00 PM



Date: 1/16/2020

Work Order: 2001223
CLIENT: Friedman & Bruya
Project: 001178

QC SUMMARY REPORT
Ion Chromatography by EPA Method 300.0

Sample ID: MB-27141	SampType: MBLK	Units: mg/L		Prep Date: 1/15/2020	RunNo: 56687
Client ID: MBLKW	Batch ID: 27141	Analysis Date: 1/15/2020		SeqNo: 1129132	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrate (as N)	ND	0.100
Ortho-Phosphate (as P)	ND	0.200

Sample ID: LCS-27141	SampType: LCS	Units: mg/L		Prep Date: 1/15/2020	RunNo: 56687
Client ID: LCSW	Batch ID: 27141	Analysis Date: 1/15/2020		SeqNo: 1129133	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrate (as N)	0.744	0.100	0.7500	0	99.2	90	110
Ortho-Phosphate (as P)	1.24	0.200	1.250	0	98.9	90	110

Sample ID: 2001223-001ADUP	SampType: DUP	Units: mg/L		Prep Date: 1/15/2020	RunNo: 56687
Client ID: CC-SW-2	Batch ID: 27141	Analysis Date: 1/15/2020		SeqNo: 1129138	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrate (as N)	2.97	0.100					2.974	0.101	20	E
Ortho-Phosphate (as P)	ND	0.200					0		20	

NOTES:

E - Estimated value. The amount exceeds the linear working range of the instrument.

Sample ID: 2001223-002AMS	SampType: MS	Units: mg/L		Prep Date: 1/15/2020	RunNo: 56687
Client ID: Pond-SW	Batch ID: 27141	Analysis Date: 1/15/2020		SeqNo: 1129140	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrate (as N)	1.80	0.100	0.7500	0.9930	108	80	120
Ortho-Phosphate (as P)	1.06	0.200	1.250	0	85.2	80	120

Work Order: 2001223
CLIENT: Friedman & Bruya
Project: 001178

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: 2001223-002AMSD		SampType: MSD		Units: mg/L		Prep Date: 1/15/2020			RunNo: 56687		
Client ID: Pond-SW		Batch ID: 27141				Analysis Date: 1/15/2020			SeqNo: 1129141		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	1.80	0.100	0.7500	0.9930	108	80	120	1.802	0.166	20	
Ortho-Phosphate (as P)	1.10	0.200	1.250	0	87.9	80	120	1.065	3.14	20	



Date: 1/16/2020

Work Order: 2001223
 CLIENT: Friedman & Bruya
 Project: 001178

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: MB-27125		SampType: MBLK			Units: µg/L		Prep Date: 1/14/2020			RunNo: 56666		
Client ID: MBLKW		Batch ID: 27125			Analysis Date: 1/15/2020					SeqNo: 1128788		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	0.199									
Surr: Triphenylphosphate	0.334		0.3987		83.7	10	132				

Sample ID: LCS-27125		SampType: LCS			Units: µg/L		Prep Date: 1/14/2020			RunNo: 56666		
Client ID: LCSW		Batch ID: 27125			Analysis Date: 1/15/2020			SeqNo: 1128789				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	1.49	0.199	1.994	0	75.0	26.5	127				
Surr: Triphenylphosphate	0.334		0.3989		83.7	10	132				

Sample ID: LCSD-27125		SampType: LCSD			Units: µg/L		Prep Date: 1/14/2020			RunNo: 56666		
Client ID: LCSW02		Batch ID: 27125			Analysis Date: 1/15/2020					SeqNo: 1128790		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	1.56	0.199	1.987	0	78.4	26.5	127	1.495	4.18	30	
Surr: Triphenylphosphate	0.341		0.3974		85.8	10	132		0		

Sample ID: 2001204-001BDUP		SampType: DUP			Units: µg/L		Prep Date: 1/14/2020			RunNo: 56666		
Client ID: BATCH		Batch ID: 27125			Analysis Date: 1/15/2020					SeqNo: 1128792		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	0.231						0		30	
Surr: Triphenylphosphate	0.440		0.4611		95.3	10	132		0		

Client Name: **FB**
 Logged by: **Carissa True**

Work Order Number: **2001223**
 Date Received: **1/14/2020 3:35:00 PM**

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
 2. How was the sample delivered? Client

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
 4. Shipping container/cooler in good condition? Yes ☒ No ☐
 5. Custody Seals present on shipping container/cooler?
 (Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Required ☒
 6. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
 7. Were all items received at a temperature of $>0^{\circ}\text{C}$ to 10.0°C * Yes ☒ No ☐ NA ☐
 8. Sample(s) in proper container(s)? Yes ☒ No ☐
 9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
 10. Are samples properly preserved? Yes ☒ No ☐
 11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
 12. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
 13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
 14. Does paperwork match bottle labels? Yes ☒ No ☐
 15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
 16. Is it clear what analyses were requested? Yes ☒ No ☐
 17. Were all holding times able to be met? Yes ☒ No ☐

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:

Item Information

Item #	Temp °C
Cooler 1	0.4
Sample 1	0.7

* Note: DoD/ELAP and TNI require items to be received at $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$

2001223

Phone # (206) 285-8282 Fax # (206) 283-5044

Fremont

PO #

001178

A-530

Please Email Results

Page # 1 of 1

TURNAROUND TIME

□ Standard (2 Weeks)

☒ RUSH 24 hour

Rush charges authorized by:

SAMPLE DISPOSAL

☒ Dispose after 30 days☐ Return samples☐ Will call with instructions

Page 11 of 11

Fax (206) 283-5044

Relinquished by:

Received by _____

Relinquished by:

Received by:

Michael Erdahl

Marken & Minnert

Friedman & Bruya

FAX

DATE _____

1	14	2
---	----	---

111417

TIME

1435

153-

001178

SAMPLE CHAIN OF CUSTODY

ME 01-14-20

UW1 / A05 / A14

Report To Charles Metadden / Thom MorinCompany TREAddress 1180 NW Maple St.City, State, ZIP Issaquah, WA 98027Phone 425-395-0060 Email cmctadden@trecomp.com

SAMPLERS (signature) _____

PROJECT NAME

015379

(Brookdale)

REMARKS

Rush TAT (24hr)

Project specific RLs? - Yes / No

PO #

015379

INVOICE TO

TRE

Page # _____ of _____

TURNAROUND TIME

☐ Standard turnaround☒ RUSH 24-hr TAT

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Archive samples☐ Other _____

Default: Dispose after 30 days

Phone (253) 515-5555 Email: info@harriss.com Project: Special Road						ANALYSES REQUESTED												
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Nitrates + Phosphates	As	Ethylene dibromide (EDB)	Diazinon + Dieldrin	Notes	
CC-SW-2	01 A-H	1/14/20	1025	H ₂ O	8								X	X	X	X		
Pond-SW	02 A-H	1/14/20	1150	H ₂ O	8								X	X	X	X		

Samples received at

44 °C (NP)

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: _____	Joe Sherris	TRE	1/14/20	1435
Received by: _____	Khoi Hoang	FBI	1/14/20	1435
Relinquished by: _____				
Received by: _____				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

January 17, 2020

Charles McFadden, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 015379, F&BI 001178

Dear Mr McFadden:

Included are the results from the testing of material submitted on January 14, 2020 from the 015379, F&BI 001178 project. There are 16 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Thom Morin
TRC0117R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on January 14, 2020 by Friedman & Bruya, Inc. from the Environmental Partners 015379, F&BI 001178 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
001178 -01	CC-SW-2
001178 -02	Pond-SW

The samples were sent to Fremont Analytical for nitrate, phosphate, and organophosphorus pesticide diazinon analyses. The report is enclosed.

The dissolved metals samples were filtered at Friedman and Bruya on January 15, 2020 at 09:42. The data were flagged accordingly.

The 8081 method blank surrogate failed below the acceptance criteria. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	CC-SW-2	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001178
Date Extracted:	01/15/20	Lab ID:	001178-01
Date Analyzed:	01/15/20	Data File:	001178-01.048
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Pond-SW	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001178
Date Extracted:	01/15/20	Lab ID:	001178-02
Date Analyzed:	01/15/20	Data File:	001178-02.049
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015379, F&BI 001178
Date Extracted:	01/15/20	Lab ID:	I0-029 mb2
Date Analyzed:	01/15/20	Data File:	I0-029 mb2.047
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	CC-SW-2 f	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001178
Date Extracted:	01/15/20	Lab ID:	001178-01
Date Analyzed:	01/15/20	Data File:	001178-01.045
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	Pond-SW f	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001178
Date Extracted:	01/15/20	Lab ID:	001178-02
Date Analyzed:	01/15/20	Data File:	001178-02.046
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	Method Blank f	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015379, F&BI 001178
Date Extracted:	01/15/20	Lab ID:	I0-030 mb2
Date Analyzed:	01/15/20	Data File:	I0-030 mb2.044
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	CC-SW-2	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001178
Date Extracted:	01/14/20	Lab ID:	001178-01
Date Analyzed:	01/15/20	Data File:	011505.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	47 ip	50	150
DBC	82	50	150

Compounds:	Concentration ug/L
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Pond-SW	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001178
Date Extracted:	01/14/20	Lab ID:	001178-02
Date Analyzed:	01/15/20	Data File:	011506.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	49 ip	50	150
DBC	62	50	150

Compounds:	Concentration ug/L
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015379, F&BI 001178
Date Extracted:	01/14/20	Lab ID:	00-123 mb
Date Analyzed:	01/14/20	Data File:	011414.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	49 vo	50	150
DBC	74	50	150

Compounds:	Concentration ug/L
Dieldrin	<0.1 js

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/17/20

Date Received: 01/14/20

Project: 015379, F&BI 001178

Date Extracted: 01/15/20

Date Analyzed: 01/15/20

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR 1,2-DIBROMOETHANE BY EPA METHOD 8011 MODIFIED**

Results Reported as µg/L (ppb)

Sample ID

EDB

Laboratory ID

CC-SW-2

<0.01

001178-01

Pond-SW

<0.01

001178-02

Method Blank

<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/17/20

Date Received: 01/14/20

Project: 015379, F&BI 001178

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 001157-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	<1	105	105	75-125	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	101	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/17/20

Date Received: 01/14/20

Project: 015379, F&BI 001178

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR DISSOLVED METALS USING EPA METHOD 6020B**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	99	99	80-120	0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/17/20

Date Received: 01/14/20

Project: 015379, F&BI 001178

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	ug/L (ppb)	0.5	75	77	70-130	3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/17/20

Date Received: 01/14/20

Project: 015379, F&BI 001178

**QUALITY ASSURANCE RESULTS
FROM THE ANALYSIS OF WATER SAMPLES FOR
1,2-DIBROMOETHANE BY EPA METHOD 8011 MODIFIED**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	Percent	Acceptance Criteria	RPD (Limit 10)
			Recovery LCS	Recovery LCSD		
1,2-Dibromoethane	ug/L (ppb)	0.10	90	98	70-130	9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



Fremont
Analytical

3600 Fremont Ave. N.

Seattle, WA 98103

T: (206) 352-3790

F: (206) 352-7178

info@fremontanalytical.com

Friedman & Bruya

Michael Erdahl

3012 16th Ave. W.

Seattle, WA 98119

RE: 001178

Work Order Number: 2001223

Attention Michael Erdahl:

Fremont Analytical, Inc. received 2 sample(s) on 1/14/2020 for the analyses presented in the following report.

Ion Chromatography by EPA Method 300.0

Organophosphorus Pesticides by EPA Method 8270-SIM

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

PRELIMINARY

DoD/ELAP Certification #L17-135, ISO/IEC 17025:2005
ORELAP Certification: WA 100009-007 (NELAP Recognized)



Date: 01/16/2020

CLIENT: Friedman & Bruya
Project: 001178
Work Order: 2001223

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2001223-001	CC-SW-2	01/14/2020 10:25 AM	01/14/2020 3:35 PM
2001223-002	Pond-SW	01/14/2020 11:50 AM	01/14/2020 3:35 PM

CLIENT: Friedman & Bruya
Project: 001178

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 2001223

Date Reported:

Client: Friedman & Bruya

Collection Date: 1/14/2020 10:25:00 AM

Project: 001178

Lab ID: 2001223-001

Matrix: Water

Client Sample ID: CC-SW-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27125

Analyst: SB

Diazinon	ND	0.198		µg/L	1	1/15/2020 1:16:36 PM
Surr: Triphenylphosphate	80.8	10 - 132		%Rec	1	1/15/2020 1:16:36 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27141

Analyst: SS

Nitrate (as N)	2.84	0.200	D	mg/L	2	1/16/2020 10:53:00 AM
Ortho-Phosphate (as P)	ND	0.200		mg/L	1	1/15/2020 8:02:00 PM



Analytical Report

Work Order: 2001223

Date Reported:

Client: Friedman & Bruya

Collection Date: 1/14/2020 11:50:00 AM

Project: 001178

Lab ID: 2001223-002

Matrix: Water

Client Sample ID: Pond-SW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27125

Analyst: SB

Diazinon	ND	0.199		µg/L	1	1/15/2020 1:39:14 PM
Surr: Triphenylphosphate	99.9	10 - 132		%Rec	1	1/15/2020 1:39:14 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27141

Analyst: SS

Nitrate (as N)	0.993	0.100		mg/L	1	1/15/2020 8:48:00 PM
Ortho-Phosphate (as P)	ND	0.200		mg/L	1	1/15/2020 8:48:00 PM



Date:

Work Order: 2001223
CLIENT: Friedman & Bruya
Project: 001178

QC SUMMARY REPORT
Ion Chromatography by EPA Method 300.0

Sample ID: MB-27141	SampType: MBLK	Units: mg/L		Prep Date: 1/15/2020	RunNo: 56687
Client ID: MBLKW	Batch ID: 27141	Analysis Date: 1/15/2020		SeqNo: 1129132	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrate (as N)	ND	0.100
Ortho-Phosphate (as P)	ND	0.200

Sample ID: LCS-27141	SampType: LCS	Units: mg/L		Prep Date: 1/15/2020	RunNo: 56687
Client ID: LCSW	Batch ID: 27141	Analysis Date: 1/15/2020		SeqNo: 1129133	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrate (as N)	0.744	0.100	0.7500	0	99.2	90	110
Ortho-Phosphate (as P)	1.24	0.200	1.250	0	98.9	90	110

Sample ID: 2001223-001ADUP	SampType: DUP	Units: mg/L		Prep Date: 1/15/2020	RunNo: 56687
Client ID: CC-SW-2	Batch ID: 27141	Analysis Date: 1/15/2020		SeqNo: 1129138	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrate (as N)	2.97	0.100					2.974	0.101	20	E
Ortho-Phosphate (as P)	ND	0.200					0		20	

NOTES:

E - Estimated value. The amount exceeds the linear working range of the instrument.

Sample ID: 2001223-002AMS	SampType: MS	Units: mg/L		Prep Date: 1/15/2020	RunNo: 56687
Client ID: Pond-SW	Batch ID: 27141	Analysis Date: 1/15/2020		SeqNo: 1129140	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrate (as N)	1.80	0.100	0.7500	0.9930	108	80	120
Ortho-Phosphate (as P)	1.06	0.200	1.250	0	85.2	80	120



Date:

Work Order: 2001223
CLIENT: Friedman & Bruya
Project: 001178

QC SUMMARY REPORT
Ion Chromatography by EPA Method 300.0

Sample ID: 2001223-002AMSD	SampType: MSD	Units: mg/L				Prep Date: 1/15/2020			RunNo: 56687		
Client ID: Pond-SW	Batch ID: 27141	Analysis Date: 1/15/2020							SeqNo: 1129141		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	1.80	0.100	0.7500	0.9930	108	80	120	1.802	0.166	20	
Ortho-Phosphate (as P)	1.10	0.200	1.250	0	87.9	80	120	1.065	3.14	20	



Date:

Work Order: 2001223
 CLIENT: Friedman & Bruya
 Project: 001178

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: MB-27125		SampType: MBLK			Units: µg/L		Prep Date: 1/14/2020			RunNo: 56666		
Client ID: MBLKW		Batch ID: 27125			Analysis Date: 1/15/2020					SeqNo: 1128788		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	0.199									
Surr: Triphenylphosphate	0.334		0.3987		83.7	10	132				

Sample ID: LCS-27125		SampType: LCS			Units: µg/L		Prep Date: 1/14/2020			RunNo: 56666		
Client ID: LCSW		Batch ID: 27125			Analysis Date: 1/15/2020					SeqNo: 1128789		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	1.49	0.199	1.994	0	75.0	26.5	127				
Surr: Triphenylphosphate	0.334		0.3989		83.7	10	132				

Sample ID: LCSD-27125		SampType: LCSD			Units: µg/L		Prep Date: 1/14/2020			RunNo: 56666		
Client ID: LCSW02		Batch ID: 27125			Analysis Date: 1/15/2020					SeqNo: 1128790		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	1.56	0.199	1.987	0	78.4	26.5	127	1.495	4.18	30	
Surr: Triphenylphosphate	0.341		0.3974		85.8	10	132		0		

Sample ID: 2001204-001BDUP		SampType: DUP			Units: µg/L		Prep Date: 1/14/2020			RunNo: 56666		
Client ID: BATCH		Batch ID: 27125			Analysis Date: 1/15/2020			SeqNo: 1128792				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	0.231						0		30	
Surr: Triphenylphosphate	0.440		0.4611		95.3	10	132		0		

Sample Log-In Check List

Client Name: **FB**
 Logged by: **Carissa True**

Work Order Number: **2001223**
 Date Received: **1/14/2020 3:35:00 PM**

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
 2. How was the sample delivered? Client

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
 4. Shipping container/cooler in good condition? Yes ☒ No ☐
 5. Custody Seals present on shipping container/cooler?
 (Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Required ☒
 6. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
 7. Were all items received at a temperature of $>0^{\circ}\text{C}$ to 10.0°C * Yes ☒ No ☐ NA ☐
 8. Sample(s) in proper container(s)? Yes ☒ No ☐
 9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
 10. Are samples properly preserved? Yes ☒ No ☐
 11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
 12. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
 13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
 14. Does paperwork match bottle labels? Yes ☒ No ☐
 15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
 16. Is it clear what analyses were requested? Yes ☒ No ☐
 17. Were all holding times able to be met? Yes ☒ No ☐

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: Date:
 By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
 Regarding:
 Client Instructions:

19. Additional remarks:

Item Information

Item #	Temp °C
Cooler 1	0.4
Sample 1	0.7

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

2001223

Phone # (206) 285-8282 Fax # (206) 283-5044

Fremont

PO #

001178

A-530

REMARKS

Please Email Results

Page # 1 of 1 of Page 11 of

TURNAROUND TIME

Standard (2 Weeks)

SH 24 hour

☐ Standard (2 Weeks)

~~BRUSH~~ 24 hour

Rush charges authorized by:

SAMPLE DISPOSAL

☒ Dispose after 30 days☐ Return samples☐ Will call with instructions

Fax (206) 283-5044

SIGNATURE

Relinquished by:

Received by _____

Relinquished by:

Received by:

PRINT NAME

Michael Erdahl

Marken & Minorität

COMPANY

Friedman & Bruya

FAX

DATE _____

1	14	2
---	----	---

111417

TIME

1435

1532

OWI / AOS / AI 4

Phone 425-395-0010 Email crucfadden@trecomp.com

4Project specific RLs? - Yes / No

T/Re

☐ Archive samples
☐ Other _____
Default: Dispose after 30 days

Samples received at 4 °C

Ph. (206) 285-8282

Received by:

Khôi Hoàng

FB I

11420	1435
-------	------

1/14/20 1430

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

February 4, 2020

Charles McFadden, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 015379, F&BI 001179

Dear Mr McFadden:

Included is the amended report from the testing of material submitted on January 14, 2020 from the 015379, F&BI 001179 project. Per your request, the dieldrin results have been lowered to the method detection limit.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Thom Morin
TRC0120R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
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Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

January 20, 2020

Charles McFadden, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 015379, F&BI 001179

Dear Mr McFadden:

Included are the results from the testing of material submitted on January 14, 2020 from the 015379, F&BI 001179 project. There are 23 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Thom Morin
TRC0120R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on January 14, 2020 by Friedman & Bruya, Inc. from the Environmental Partners 015379, F&BI 001179 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
001179 -01	CC-Sed-2
001179 -02	CC-Sed-2:1
001179 -03	CC-Sed-3
001179 -04	CC-Sed-3:1
001179 -05	Pond-Sed-1
001179 -06	Pond-Sed-1:1
001179 -07	Pond-Sed-2
001179 -08	Pond-Sed-2:1
001179 -09	Pond-Sed-3
001179 -10	Pond-Sed-3:1

Samples CC-Sed-2, CC-Sed-3, Pond-Sed-2, and Pond-Sed-3 were sent to Fremont Analytical for nitrate, phosphate, and organophosphorus pesticide diazinon analyses. The report is enclosed.

A 8260D internal standard failed the acceptance criteria for sample Pond-Sed-1. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	CC-Sed-2	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	001179-01
Date Analyzed:	01/15/20	Data File:	001179-01.079
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	3.19
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	CC-Sed-3	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	001179-03
Date Analyzed:	01/15/20	Data File:	001179-03.082
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	8.88
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Pond-Sed-1	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	001179-05
Date Analyzed:	01/15/20	Data File:	001179-05.083
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	8.25
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Pond-Sed-2	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	001179-07
Date Analyzed:	01/15/20	Data File:	001179-07.084
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	10.4
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Pond-Sed-3	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	001179-09
Date Analyzed:	01/15/20	Data File:	001179-09.085
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	5.77
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	I0-032 mb
Date Analyzed:	01/15/20	Data File:	I0-032 mb.077
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	CC-Sed-2	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	001179-01
Date Analyzed:	01/15/20	Data File:	011515.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	93	50	150
4-Bromofluorobenzene	119	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	CC-Sed-3	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	001179-03
Date Analyzed:	01/15/20	Data File:	011511.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	130	50	150
Toluene-d8	103	50	150
4-Bromofluorobenzene	94	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	Pond-Sed-1	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	001179-05
Date Analyzed:	01/16/20	Data File:	011615.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104 J	50	150
Toluene-d8	92 J	50	150
4-Bromofluorobenzene	115 J	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005 J

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	Pond-Sed-2	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	001179-07
Date Analyzed:	01/15/20	Data File:	011513A.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	129	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	99 J	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	Pond-Sed-3	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	001179-09
Date Analyzed:	01/15/20	Data File:	011514.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	112	50	150
Toluene-d8	104	50	150
4-Bromofluorobenzene	111	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	00-090 mb2
Date Analyzed:	01/15/20	Data File:	011508.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	102	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	CC-Sed-2	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/14/20	Lab ID:	001179-01 1/6
Date Analyzed:	01/15/20	Data File:	011507.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	68	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.006

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	CC-Sed-3	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/14/20	Lab ID:	001179-03 1/6
Date Analyzed:	01/15/20	Data File:	011508.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.006

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Pond-Sed-1	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/14/20	Lab ID:	001179-05 1/6
Date Analyzed:	01/15/20	Data File:	011509.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	58	50	150
DBC	66	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.006

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Pond-Sed-2	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/14/20	Lab ID:	001179-07 1/6
Date Analyzed:	01/15/20	Data File:	011514.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	60	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.006

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Pond-Sed-3	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/14/20	Lab ID:	001179-09 1/6
Date Analyzed:	01/15/20	Data File:	011510.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.006

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015379, F&BI 001179
Date Extracted:	01/14/20	Lab ID:	00-122 mb 1/6
Date Analyzed:	01/14/20	Data File:	011405.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.006

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/20/20

Date Received: 01/14/20

Project: 015379, F&BI 001179

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 001179-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	1.94	81	83	75-125	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	86	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/20/20

Date Received: 01/14/20

Project: 015379, F&BI 001179

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260D DIRECT SPARGE**

Laboratory Code: 001156-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet wt)	Duplicate Result (Wet wt)	RPD (Limit 20)
1,2-Dibromoethane (EDB)	mg/kg (ppm)	<0.005	<0.005	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
1,2-Dibromoethane (EDB)	mg/kg (ppm)	0.05	113	111	70-130	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/20/20

Date Received: 01/14/20

Project: 015379, F&BI 001179

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 001156-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	66	64	50-150	3

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	82	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



Fremont
Analytical

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Friedman & Bruya
Michael Erdahl
3012 16th Ave. W.
Seattle, WA 98119

RE: 001179
Work Order Number: 2001222

January 15, 2020

Attention Michael Erdahl:

Fremont Analytical, Inc. received 10 sample(s) on 1/14/2020 for the analyses presented in the following report.

Ion Chromatography by EPA Method 300.0
Organophosphorus Pesticides by EPA Method 8270-SIM
Sample Moisture (Percent Moisture)

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

DoD/ELAP Certification #L17-135, ISO/IEC 17025:2005
ORELAP Certification: WA 100009-007 (NELAP Recognized)

Original

www.fremontanalytical.com

CLIENT: Friedman & Bruya
Project: 001179
Work Order: 2001222

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2001222-001	CC-Sed-2	01/14/2020 9:00 AM	01/14/2020 3:35 PM
2001222-002	CC-Sed-2:1	01/14/2020 9:10 AM	01/14/2020 3:35 PM
2001222-003	CC-Sed-3	01/14/2020 10:30 AM	01/14/2020 3:35 PM
2001222-004	CC-Sed-3:1	01/14/2020 10:40 AM	01/14/2020 3:35 PM
2001222-005	Pond-Sed-1	01/14/2020 11:40 AM	01/14/2020 3:35 PM
2001222-006	Pond-Sed-1:1	01/14/2020 11:45 AM	01/14/2020 3:35 PM
2001222-007	Pond-Sed-2	01/14/2020 12:20 PM	01/14/2020 3:35 PM
2001222-008	Pond-Sed-2:1	01/14/2020 12:25 PM	01/14/2020 3:35 PM
2001222-009	Pond-Sed-3	01/14/2020 12:45 PM	01/14/2020 3:35 PM
2001222-010	Pond-Sed-3:1	01/14/2020 12:50 PM	01/14/2020 3:35 PM

CLIENT: Friedman & Bruya
Project: 001179

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 2001222

Date Reported: 1/15/2020

Client: Friedman & Bruya

Collection Date: 1/14/2020 9:00:00 AM

Project: 001179

Lab ID: 2001222-001

Matrix: Soil

Client Sample ID: CC-Sed-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27114

Analyst: SB

Diazinon	ND	838	D	µg/Kg-dry	10	1/15/2020 2:46:55 PM
Surr: Triphenylphosphate	72.6	10.7 - 154	D	%Rec	10	1/15/2020 2:46:55 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27121

Analyst: SS

Nitrate (as N)	ND	1.76		mg/Kg-dry	1	1/15/2020 1:52:00 PM
Orthophosphate (as P)	ND	3.52		mg/Kg-dry	1	1/15/2020 1:52:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R56636

Analyst: CJ

Percent Moisture	44.9	0.500		wt%	1	1/14/2020 5:05:41 PM
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Analytical Report

Work Order: 2001222

Date Reported: 1/15/2020

Client: Friedman & Bruya

Collection Date: 1/14/2020 10:30:00 AM

Project: 001179

Lab ID: 2001222-003

Matrix: Soil

Client Sample ID: CC-Sed-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27114

Analyst: SB

Diazinon	ND	592	D	µg/Kg-dry	10	1/15/2020 3:08:57 PM
Surr: Triphenylphosphate	80.2	10.7 - 154	D	%Rec	10	1/15/2020 3:08:57 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27121

Analyst: SS

Nitrate (as N)	ND	1.30		mg/Kg-dry	1	1/15/2020 2:15:00 PM
Orthophosphate (as P)	ND	2.59		mg/Kg-dry	1	1/15/2020 2:15:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R56636

Analyst: CJ

Percent Moisture	23.0	0.500		wt%	1	1/14/2020 5:05:41 PM
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Analytical Report

Work Order: 2001222

Date Reported: 1/15/2020

Client: Friedman & Bruya

Collection Date: 1/14/2020 11:40:00 AM

Project: 001179

Lab ID: 2001222-005

Matrix: Soil

Client Sample ID: Pond-Sed-1

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27114

Analyst: SB

Diazinon	ND	703	D	µg/Kg-dry	10	1/15/2020 3:31:24 PM
Surr: Triphenylphosphate	74.4	10.7 - 154	D	%Rec	10	1/15/2020 3:31:24 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27121

Analyst: SS

Nitrate (as N)	ND	1.47		mg/Kg-dry	1	1/15/2020 2:38:00 PM
Orthophosphate (as P)	ND	2.95		mg/Kg-dry	1	1/15/2020 2:38:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R56636

Analyst: CJ

Percent Moisture	33.3	0.500		wt%	1	1/14/2020 5:05:41 PM
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Analytical Report

Work Order: 2001222

Date Reported: 1/15/2020

Client: Friedman & Bruya

Collection Date: 1/14/2020 12:20:00 PM

Project: 001179

Lab ID: 2001222-007

Matrix: Soil

Client Sample ID: Pond-Sed-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27114

Analyst: SB

Diazinon	ND	567	D	µg/Kg-dry	10	1/15/2020 3:53:58 PM
Surr: Triphenylphosphate	75.3	10.7 - 154	D	%Rec	10	1/15/2020 3:53:58 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27121

Analyst: SS

Nitrate (as N)	1.84	1.16		mg/Kg-dry	1	1/15/2020 3:01:00 PM
Orthophosphate (as P)	ND	2.32		mg/Kg-dry	1	1/15/2020 3:01:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R56636

Analyst: CJ

Percent Moisture	15.2	0.500		wt%	1	1/14/2020 5:05:41 PM
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Analytical Report

Work Order: 2001222

Date Reported: 1/15/2020

Client: Friedman & Bruya

Collection Date: 1/14/2020 12:45:00 PM

Project: 001179

Lab ID: 2001222-009

Matrix: Soil

Client Sample ID: Pond-Sed-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27114

Analyst: SB

Diazinon	ND	517	D	µg/Kg-dry	10	1/15/2020 4:16:27 PM
Surr: Triphenylphosphate	127	10.7 - 154	D	%Rec	10	1/15/2020 4:16:27 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27121

Analyst: SS

Nitrate (as N)	ND	1.17		mg/Kg-dry	1	1/15/2020 4:11:00 PM
Orthophosphate (as P)	ND	2.34		mg/Kg-dry	1	1/15/2020 4:11:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R56636

Analyst: CJ

Percent Moisture	13.0	0.500		wt%	1	1/14/2020 5:05:41 PM
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Work Order: 2001222
CLIENT: Friedman & Bruya
Project: 001179

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: MB-27121		SampType: MBLK		Units: mg/Kg		Prep Date: 1/14/2020			RunNo: 56674			
Client ID: MBLKS		Batch ID: 27121					Analysis Date: 1/15/2020			SeqNo: 1128921		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	ND	1.00									
Orthophosphate (as P)	ND	2.00									

Sample ID: LCS-27121		SampType: LCS			Units: mg/Kg		Prep Date: 1/14/2020			RunNo: 56674		
Client ID: LCSS		Batch ID: 27121			Analysis Date: 1/15/2020			SeqNo: 1128922				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	7.33	1.00	7.500	0	97.7	90	110				
Orthophosphate (as P)	12.2	2.00	12.50	0	98.0	90	110				



Date: 1/15/2020

Work Order: 2001222
 CLIENT: Friedman & Bruya
 Project: 001179

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: MB-27114		SampType: MBLK		Units: µg/Kg		Prep Date: 1/14/2020			RunNo: 56650			
Client ID: MBLKS		Batch ID: 27114					Analysis Date: 1/14/2020			SeqNo: 1128470		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	50.0									
Surr: Triphenylphosphate	21.4		20.00		107	10.7	154				

Sample ID: LCS-27114		SampType: LCS			Units: µg/Kg		Prep Date: 1/14/2020			RunNo: 56650		
Client ID: LCSS		Batch ID: 27114			Analysis Date: 1/14/2020					SeqNo: 1128471		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	15.4	50.0	20.00	0	77.2	37.1	132				
Surr: Triphenylphosphate	21.6		20.00		108	10.7	154				

Sample ID: 2001205-001ADUP		SampType: DUP			Units: µg/Kg-dry		Prep Date: 1/14/2020			RunNo: 56650		
Client ID: BATCH		Batch ID: 27114			Analysis Date: 1/14/2020					SeqNo: 1128473		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	80.5						0		30	
Surr: Triphenylphosphate	21.1		32.22		65.6	10.7	154		0		

Sample ID: 2001205-001AMS		SampType: MS			Units: µg/Kg-dry		Prep Date: 1/14/2020			RunNo: 56650		
Client ID: BATCH		Batch ID: 27114			Analysis Date: 1/14/2020					SeqNo: 1128474		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	15.5	82.5	33.00	0	47.1	9.74	142				
Surr: Triphenylphosphate	26.0		33.00		78.7	10.7	154				

Sample ID: 2001205-001AMSD		SampType: MSD			Units: µg/Kg-dry		Prep Date: 1/14/2020			RunNo: 56650		
Client ID: BATCH		Batch ID: 27114			Analysis Date: 1/15/2020					SeqNo: 1128883		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	13.1	755	30.18	0	0	9.74	142	0		30	DS
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Work Order: 2001222

CLIENT: Friedman & Bruya

Project: 001179

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: 2001205-001AMSD	SampType: MSD	Units: µg/Kg-dry	Prep Date: 1/14/2020	RunNo: 56650							
Client ID: BATCH	Batch ID: 27114		Analysis Date: 1/15/2020	SeqNo: 1128883							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Surr: Triphenylphosphate	22.5		30.18		74.5	10.7	154		0		D
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NOTES:

S - Outlying spike recovery(ies) observed.

Client Name: **FB**
 Logged by: **Carissa True**

Work Order Number: **2001222**
 Date Received: **1/14/2020 3:35:00 PM**

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
 2. How was the sample delivered? Client

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
 4. Shipping container/cooler in good condition? Yes ☒ No ☐
 5. Custody Seals present on shipping container/cooler?
 (Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Required ☒
 6. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
 7. Were all items received at a temperature of $>0^{\circ}\text{C}$ to 10.0°C * Yes ☒ No ☐ NA ☐
 8. Sample(s) in proper container(s)? Yes ☒ No ☐
 9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
 10. Are samples properly preserved? Yes ☒ No ☐
 11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
 12. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
 13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
 14. Does paperwork match bottle labels? Yes ☒ No ☐
 15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
 16. Is it clear what analyses were requested? Yes ☒ No ☐
 17. Were all holding times able to be met? Yes ☒ No ☐

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:

Item Information

Item #	Temp °C
Cooler 1	0.4
Sample 1	0.7

* Note: DoD/ELAP and TNI require items to be received at $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

2001222

Page 14 of 14

Send Report To Michael Erdahl
 Company Friedman and Bruya, Inc.
 Address 3012 16th Ave W
 City, State, ZIP Seattle, WA 98119
 Phone # (206) 285-8282 Fax # (206) 283-5044

SUBCONTRACTER <u>Fremont</u>	
PROJECT NAME/NO. <u>001179</u>	PO # <u>A-530</u>
REMARKS <u>Please Email Results</u>	

Page # <u>1</u> of <u>1</u>
TURNAROUND TIME <input type="checkbox"/> Standard (2 Weeks) <input checked="" type="checkbox"/> RUSH <u>24 hour</u> Rush charges authorized by: <u>[Signature]</u>
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Return samples <input type="checkbox"/> Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED										Notes
						Dioxins/Furans	EPH	VPH	Diazinon	Nitrate	Phosphate					
CC-Sed-2		1/14/20	0900	SOIL	1				✓	✓	✓					
CC-Sed-2:1			0910		1											
CC-Sed-3			1030		1				✓	✓	✓					HOLD
CC-Sed-3:1			1040		1											
Pond-Sed-1			1140		1				✓	✓	✓					HOLD
Pond-Sed-1:1			1145		1				✓	✓	✓					HOLD
Pond-Sed-2			1220		1				✓	✓	✓					HOLD
Pond-Sed-2:1			1225		1				✓	✓	✓					HOLD
Pond-Sed-3			1245		1				✓	✓	✓					HOLD
Pond-Sed-3:1			1250		1				✓	✓	✓					HOLD

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044

SIGNATURE		PRINT NAME		COMPANY	DATE	TIME
Relinquished by:	<u>[Signature]</u>	Michael Erdahl		Friedman & Bruya	1/14/20	1532
Received by:	<u>[Signature]</u>	<u>[Signature]</u>		FAI	1/14/20	1535
Relinquished by:						
Received by:						

001179

SAMPLE CHAIN OF CUSTODY

ME 01-14-20

VS4 / A04

Report To Charles McHadden / Thom MerinCompany TRCAddress 480 NW Maple St.City, State, ZIP Issaquah, WA 98027Phone 425-395-0015 Email cmchadden@trcompartments.com

SAMPLERS (signature)

PROJECT NAME

015379
(Brookdale)

PO #

015379

REMARKS

Rush (24hr) TAT

INVOICE TO

TRC

Page # _____ of _____

TURNAROUND TIME

☐ Standard turnaround☒ RUSH 24 HR TAT

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Archive samples☐ Other _____

Default: Dispose after 30 days

Project specific RLs? - Yes / No



						ANALYSES REQUESTED											
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Nitrates + Phosphates	As	Fluorine Dibromide (EDB)	Diazinon + Dieldrin	Notes
CC-Sed-2	01 A-E	1/14/20	0900	Sediment	5								X	X	X	X	
CC-Sed-2:1	02		0910														
CC-Sed-3	03		1030										X	X	X	X	
CC-Sed-3:1	04		1040														
Pond-Sed-1	05		1140										X	X	X	X	
Pond-Sed-1:1	06		1145														
Pond-Sed-2	07		1220										X	X	X	X	
Pond-Sed-2:1	08		1225														
Pond-Sed-3	09		1245										X	X	X	X	
Pond-Sed-3:1	10		1250														

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE		PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Joe Shumard	TRC	1/14/20	1435
Received by:		Khai Hoang	FBI	1/14/20	1435
Relinquished by:			Samples received at	4 °C	
Received by:					

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

January 20, 2020

Charles McFadden, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 015379, F&BI 001179

Dear Mr McFadden:

Included are the results from the testing of material submitted on January 14, 2020 from the 015379, F&BI 001179 project. There are 23 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Thom Morin
TRC0120R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on January 14, 2020 by Friedman & Bruya, Inc. from the Environmental Partners 015379, F&BI 001179 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
001179 -01	CC-Sed-2
001179 -02	CC-Sed-2:1
001179 -03	CC-Sed-3
001179 -04	CC-Sed-3:1
001179 -05	Pond-Sed-1
001179 -06	Pond-Sed-1:1
001179 -07	Pond-Sed-2
001179 -08	Pond-Sed-2:1
001179 -09	Pond-Sed-3
001179 -10	Pond-Sed-3:1

Samples CC-Sed-2, CC-Sed-3, Pond-Sed-2, and Pond-Sed-3 were sent to Fremont Analytical for nitrate, phosphate, and organophosphorus pesticide diazinon analyses. The report is enclosed.

A 8260D internal standard failed the acceptance criteria for sample Pond-Sed-1. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	CC-Sed-2	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	001179-01
Date Analyzed:	01/15/20	Data File:	001179-01.079
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	3.19
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	CC-Sed-3	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	001179-03
Date Analyzed:	01/15/20	Data File:	001179-03.082
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	8.88
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Pond-Sed-1	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	001179-05
Date Analyzed:	01/15/20	Data File:	001179-05.083
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	8.25
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Pond-Sed-2	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	001179-07
Date Analyzed:	01/15/20	Data File:	001179-07.084
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	10.4
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Pond-Sed-3	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	001179-09
Date Analyzed:	01/15/20	Data File:	001179-09.085
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	5.77
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	I0-032 mb
Date Analyzed:	01/15/20	Data File:	I0-032 mb.077
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	CC-Sed-2	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	001179-01
Date Analyzed:	01/15/20	Data File:	011515.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	93	50	150
4-Bromofluorobenzene	119	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	CC-Sed-3	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	001179-03
Date Analyzed:	01/15/20	Data File:	011511.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	130	50	150
Toluene-d8	103	50	150
4-Bromofluorobenzene	94	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	Pond-Sed-1	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	001179-05
Date Analyzed:	01/16/20	Data File:	011615.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104 J	50	150
Toluene-d8	92 J	50	150
4-Bromofluorobenzene	115 J	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005 J

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	Pond-Sed-2	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	001179-07
Date Analyzed:	01/15/20	Data File:	011513A.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	129	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	99 J	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	Pond-Sed-3	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	001179-09
Date Analyzed:	01/15/20	Data File:	011514.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	112	50	150
Toluene-d8	104	50	150
4-Bromofluorobenzene	111	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015379, F&BI 001179
Date Extracted:	01/15/20	Lab ID:	00-090 mb2
Date Analyzed:	01/15/20	Data File:	011508.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	102	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	CC-Sed-2	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/14/20	Lab ID:	001179-01 1/6
Date Analyzed:	01/15/20	Data File:	011507.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	68	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	CC-Sed-3	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/14/20	Lab ID:	001179-03 1/6
Date Analyzed:	01/15/20	Data File:	011508.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Pond-Sed-1	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/14/20	Lab ID:	001179-05 1/6
Date Analyzed:	01/15/20	Data File:	011509.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	58	50	150
DBC	66	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Pond-Sed-2	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/14/20	Lab ID:	001179-07 1/6
Date Analyzed:	01/15/20	Data File:	011514.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	60	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Pond-Sed-3	Client:	Environmental Partners
Date Received:	01/14/20	Project:	015379, F&BI 001179
Date Extracted:	01/14/20	Lab ID:	001179-09 1/6
Date Analyzed:	01/15/20	Data File:	011510.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015379, F&BI 001179
Date Extracted:	01/14/20	Lab ID:	00-122 mb 1/6
Date Analyzed:	01/14/20	Data File:	011405.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/20/20

Date Received: 01/14/20

Project: 015379, F&BI 001179

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 001179-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	1.94	81	83	75-125	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	86	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/20/20

Date Received: 01/14/20

Project: 015379, F&BI 001179

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260D DIRECT SPARGE**

Laboratory Code: 001156-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet wt)	Duplicate Result (Wet wt)	RPD (Limit 20)
1,2-Dibromoethane (EDB)	mg/kg (ppm)	<0.005	<0.005	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
1,2-Dibromoethane (EDB)	mg/kg (ppm)	0.05	113	111	70-130	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/20/20

Date Received: 01/14/20

Project: 015379, F&BI 001179

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 001156-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	66	64	50-150	3

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	82	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



Fremont
Analytical

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Friedman & Bruya
Michael Erdahl
3012 16th Ave. W.
Seattle, WA 98119

RE: 001179
Work Order Number: 2001222

January 15, 2020

Attention Michael Erdahl:

Fremont Analytical, Inc. received 10 sample(s) on 1/14/2020 for the analyses presented in the following report.

Ion Chromatography by EPA Method 300.0
Organophosphorus Pesticides by EPA Method 8270-SIM
Sample Moisture (Percent Moisture)

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

DoD/ELAP Certification #L17-135, ISO/IEC 17025:2005
ORELAP Certification: WA 100009-007 (NELAP Recognized)

CLIENT: Friedman & Bruya
Project: 001179
Work Order: 2001222

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2001222-001	CC-Sed-2	01/14/2020 9:00 AM	01/14/2020 3:35 PM
2001222-002	CC-Sed-2:1	01/14/2020 9:10 AM	01/14/2020 3:35 PM
2001222-003	CC-Sed-3	01/14/2020 10:30 AM	01/14/2020 3:35 PM
2001222-004	CC-Sed-3:1	01/14/2020 10:40 AM	01/14/2020 3:35 PM
2001222-005	Pond-Sed-1	01/14/2020 11:40 AM	01/14/2020 3:35 PM
2001222-006	Pond-Sed-1:1	01/14/2020 11:45 AM	01/14/2020 3:35 PM
2001222-007	Pond-Sed-2	01/14/2020 12:20 PM	01/14/2020 3:35 PM
2001222-008	Pond-Sed-2:1	01/14/2020 12:25 PM	01/14/2020 3:35 PM
2001222-009	Pond-Sed-3	01/14/2020 12:45 PM	01/14/2020 3:35 PM
2001222-010	Pond-Sed-3:1	01/14/2020 12:50 PM	01/14/2020 3:35 PM

CLIENT: Friedman & Bruya
Project: 001179

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 2001222

Date Reported: 1/15/2020

Client: Friedman & Bruya

Collection Date: 1/14/2020 9:00:00 AM

Project: 001179

Lab ID: 2001222-001

Matrix: Soil

Client Sample ID: CC-Sed-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27114

Analyst: SB

Diazinon	ND	838	D	µg/Kg-dry	10	1/15/2020 2:46:55 PM
Surr: Triphenylphosphate	72.6	10.7 - 154	D	%Rec	10	1/15/2020 2:46:55 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27121

Analyst: SS

Nitrate (as N)	ND	1.76		mg/Kg-dry	1	1/15/2020 1:52:00 PM
Orthophosphate (as P)	ND	3.52		mg/Kg-dry	1	1/15/2020 1:52:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R56636

Analyst: CJ

Percent Moisture	44.9	0.500		wt%	1	1/14/2020 5:05:41 PM
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Analytical Report

Work Order: 2001222

Date Reported: 1/15/2020

Client: Friedman & Bruya

Collection Date: 1/14/2020 10:30:00 AM

Project: 001179

Lab ID: 2001222-003

Matrix: Soil

Client Sample ID: CC-Sed-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27114

Analyst: SB

Diazinon	ND	592	D	µg/Kg-dry	10	1/15/2020 3:08:57 PM
Surr: Triphenylphosphate	80.2	10.7 - 154	D	%Rec	10	1/15/2020 3:08:57 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27121

Analyst: SS

Nitrate (as N)	ND	1.30		mg/Kg-dry	1	1/15/2020 2:15:00 PM
Orthophosphate (as P)	ND	2.59		mg/Kg-dry	1	1/15/2020 2:15:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R56636

Analyst: CJ

Percent Moisture	23.0	0.500		wt%	1	1/14/2020 5:05:41 PM
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Analytical Report

Work Order: 2001222

Date Reported: 1/15/2020

Client: Friedman & Bruya

Collection Date: 1/14/2020 11:40:00 AM

Project: 001179

Lab ID: 2001222-005

Matrix: Soil

Client Sample ID: Pond-Sed-1

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27114

Analyst: SB

Diazinon	ND	703	D	µg/Kg-dry	10	1/15/2020 3:31:24 PM
Surr: Triphenylphosphate	74.4	10.7 - 154	D	%Rec	10	1/15/2020 3:31:24 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27121

Analyst: SS

Nitrate (as N)	ND	1.47		mg/Kg-dry	1	1/15/2020 2:38:00 PM
Orthophosphate (as P)	ND	2.95		mg/Kg-dry	1	1/15/2020 2:38:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R56636

Analyst: CJ

Percent Moisture	33.3	0.500		wt%	1	1/14/2020 5:05:41 PM
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Analytical Report

Work Order: 2001222

Date Reported: 1/15/2020

Client: Friedman & Bruya

Collection Date: 1/14/2020 12:20:00 PM

Project: 001179

Lab ID: 2001222-007

Matrix: Soil

Client Sample ID: Pond-Sed-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27114

Analyst: SB

Diazinon	ND	567	D	µg/Kg-dry	10	1/15/2020 3:53:58 PM
Surr: Triphenylphosphate	75.3	10.7 - 154	D	%Rec	10	1/15/2020 3:53:58 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27121

Analyst: SS

Nitrate (as N)	1.84	1.16		mg/Kg-dry	1	1/15/2020 3:01:00 PM
Orthophosphate (as P)	ND	2.32		mg/Kg-dry	1	1/15/2020 3:01:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R56636

Analyst: CJ

Percent Moisture	15.2	0.500		wt%	1	1/14/2020 5:05:41 PM
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Analytical Report

Work Order: 2001222

Date Reported: 1/15/2020

Client: Friedman & Bruya

Collection Date: 1/14/2020 12:45:00 PM

Project: 001179

Lab ID: 2001222-009

Matrix: Soil

Client Sample ID: Pond-Sed-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27114

Analyst: SB

Diazinon	ND	517	D	µg/Kg-dry	10	1/15/2020 4:16:27 PM
Surr: Triphenylphosphate	127	10.7 - 154	D	%Rec	10	1/15/2020 4:16:27 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27121

Analyst: SS

Nitrate (as N)	ND	1.17		mg/Kg-dry	1	1/15/2020 4:11:00 PM
Orthophosphate (as P)	ND	2.34		mg/Kg-dry	1	1/15/2020 4:11:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R56636

Analyst: CJ

Percent Moisture	13.0	0.500		wt%	1	1/14/2020 5:05:41 PM
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Work Order: 2001222
CLIENT: Friedman & Bruya
Project: 001179

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: MB-27121		SampType: MBLK		Units: mg/Kg		Prep Date: 1/14/2020		RunNo: 56674			
Client ID: MBLKS		Batch ID: 27121				Analysis Date: 1/15/2020		SeqNo: 1128921			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Nitrate (as N)	ND	1.00									
Orthophosphate (as P)	ND	2.00									

Sample ID: LCS-27121		SampType: LCS			Units: mg/Kg		Prep Date: 1/14/2020			RunNo: 56674		
Client ID: LCSS		Batch ID: 27121			Analysis Date: 1/15/2020					SeqNo: 1128922		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	7.33	1.00	7.500	0	97.7	90	110				
Orthophosphate (as P)	12.2	2.00	12.50	0	98.0	90	110				



Date: 1/15/2020

Work Order: 2001222
 CLIENT: Friedman & Bruya
 Project: 001179

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: MB-27114		SampType: MBLK			Units: µg/Kg		Prep Date: 1/14/2020			RunNo: 56650		
Client ID: MBLKS		Batch ID: 27114			Analysis Date: 1/14/2020			SeqNo: 1128470				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	50.0									
Surr: Triphenylphosphate	21.4		20.00		107	10.7	154				

Sample ID: LCS-27114		SampType: LCS			Units: µg/Kg		Prep Date: 1/14/2020			RunNo: 56650		
Client ID: LCSS		Batch ID: 27114			Analysis Date: 1/14/2020					SeqNo: 1128471		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	15.4	50.0	20.00	0	77.2	37.1	132				
Surr: Triphenylphosphate	21.6		20.00		108	10.7	154				

Sample ID: 2001205-001ADUP		SampType: DUP			Units: µg/Kg-dry		Prep Date: 1/14/2020			RunNo: 56650		
Client ID: BATCH		Batch ID: 27114			Analysis Date: 1/14/2020					SeqNo: 1128473		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	80.5						0		30	
Surr: Triphenylphosphate	21.1		32.22		65.6	10.7	154		0		

Sample ID: 2001205-001AMS		SampType: MS			Units: µg/Kg-dry		Prep Date: 1/14/2020			RunNo: 56650		
Client ID: BATCH		Batch ID: 27114			Analysis Date: 1/14/2020			SeqNo: 1128474				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	15.5	82.5	33.00	0	47.1	9.74	142				
Surr: Triphenylphosphate	26.0		33.00		78.7	10.7	154				

Sample ID: 2001205-001AMSD		SampType: MSD			Units: µg/Kg-dry		Prep Date: 1/14/2020			RunNo: 56650		
Client ID: BATCH		Batch ID: 27114			Analysis Date: 1/15/2020					SeqNo: 1128883		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	13.1	755	30.18	0	0	9.74	142	0		30	DS
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Work Order: 2001222

CLIENT: Friedman & Bruya

Project: 001179

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: 2001205-001AMSD	SampType: MSD	Units: µg/Kg-dry			Prep Date: 1/14/2020			RunNo: 56650			
Client ID: BATCH	Batch ID: 27114	Analysis Date: 1/15/2020						SeqNo: 1128883			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Surr: Triphenylphosphate	22.5		30.18		74.5	10.7	154		0		D
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NOTES:

S - Outlying spike recovery(ies) observed.

Client Name: **FB**
 Logged by: **Carissa True**

Work Order Number: **2001222**
 Date Received: **1/14/2020 3:35:00 PM**

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
 2. How was the sample delivered? Client

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
 4. Shipping container/cooler in good condition? Yes ☒ No ☐
 5. Custody Seals present on shipping container/cooler?
 (Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Required ☒
 6. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
 7. Were all items received at a temperature of >0°C to 10.0°C * Yes ☒ No ☐ NA ☐
 8. Sample(s) in proper container(s)? Yes ☒ No ☐
 9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
 10. Are samples properly preserved? Yes ☒ No ☐
 11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
 12. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
 13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
 14. Does paperwork match bottle labels? Yes ☒ No ☐
 15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
 16. Is it clear what analyses were requested? Yes ☒ No ☐
 17. Were all holding times able to be met? Yes ☒ No ☐

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:

Item Information

Item #	Temp °C
Cooler 1	0.4
Sample 1	0.7

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

2001222

Page 14 of 14

Send Report To Michael Erdahl
 Company Friedman and Bruya, Inc.
 Address 3012 16th Ave W
 City, State, ZIP Seattle, WA 98119
 Phone # (206) 285-8282 Fax # (206) 283-5044

SUBCONTRACTER <u>Fremont</u>	
PROJECT NAME/NO. <u>001179</u>	PO # <u>A-530</u>
REMARKS <u>Please Email Results</u>	

Page # <u>1</u> of <u>1</u>
TURNAROUND TIME <input type="checkbox"/> Standard (2 Weeks) <input checked="" type="checkbox"/> RUSH <u>24 hour</u> Rush charges authorized by: <u>[Signature]</u>
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Return samples <input type="checkbox"/> Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED										Notes
						Dioxins/Furans	EPH	VPH	Diazinon	Nitrate	Phosphate					
CC-Sed-2		1/14/20	0900	SOIL	1				✓	✓	✓					
CC-Sed-2:1			0910		1											
CC-Sed-3			1030		1				✓	✓	✓					HOLD
CC-Sed-3:1			1040		1											
Pond-Sed-1			1140		1				✓	✓	✓					HOLD
Pond-Sed-1:1			1145		1				✓	✓	✓					HOLD
Pond-Sed-2			1220		1				✓	✓	✓					HOLD
Pond-Sed-2:1			1225		1				✓	✓	✓					HOLD
Pond-Sed-3			1245		1				✓	✓	✓					HOLD
Pond-Sed-3:1			1250		1				✓	✓	✓					HOLD

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044

SIGNATURE		PRINT NAME		COMPANY	DATE	TIME
Relinquished by:	<u>[Signature]</u>	Michael Erdahl		Friedman & Bruya	1/14/20	1532
Received by:	<u>[Signature]</u>	<u>[Signature]</u>		FAI	1/14/20	1535
Relinquished by:						
Received by:						

001179

SAMPLE CHAIN OF CUSTODY

ME 01-14-20

VS4 / A04

Report To Charles McHadden / Thom MerinCompany TRCAddress 480 NW Maple St.City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email cmchadden@trcompartments.com

SAMPLERS (signature)

PROJECT NAME

015379
(Brookdale)

PO #

015379

REMARKS

Rush (24hr) TAT

INVOICE TO

TRC

Page # _____ of _____

TURNAROUND TIME

☐ Standard turnaround☒ RUSH 24 HR TAT

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Archive samples☐ Other _____

Default: Dispose after 30 days

Project specific RLs? - Yes / No



						ANALYSES REQUESTED											
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Nitrates + Phosphates	As	Fluorine Dibromide (EDB)	Diazinon + Dieldrin	Notes
CC-Sed-2	01 A-E	1/14/20	0900	Sediment	5								X	X	X	X	
CC-Sed-2:1	02		0910														
CC-Sed-3	03		1030										X	X	X	X	
CC-Sed-3:1	04		1040														
Pond-Sed-1	05		1140										X	X	X	X	
Pond-Sed-1:1	06		1145														
Pond-Sed-2	07		1220										X	X	X	X	
Pond-Sed-2:1	08		1225														
Pond-Sed-3	09		1245										X	X	X	X	
Pond-Sed-3:1	10		1250														

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE		PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Joe Shumard	TRC	1/14/20	1435
Received by:		Khai Hoang	FBI	1/14/20	1435
Relinquished by:			Samples received at	4 °C	
Received by:					

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

January 21, 2020

Charles McFadden, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 015397, F&BI 001189

Dear Mr McFadden:

Included are the results from the testing of material submitted on January 15, 2020 from the 015397, F&BI 001189 project. There are 16 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Thom Morin
TRC0121R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on January 15, 2020 by Friedman & Bruya, Inc. from the Environmental Partners 015397, F&BI 001189 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
001189-01	B-1:Surface
001189-02	B-1:2
001189-03	B-2:Surface
001189-04	B-2:2
001189-05	B-3:Surface
001189-06	B-3:2
001189-07	B-4:Surface
001189-08	B-4:2
001189-09	B-5:Surface
001189-10	B-5:2

Samples B-1:Surface, B-2:Surface, B-3:Surface, B-4:Surface, and B-5:Surface were sent to Fremont Analytical for nitrate, phosphate, and organophosphorus pesticide diazinon analyses. The report is enclosed.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	B-1:Surface	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001189
Date Extracted:	01/16/20	Lab ID:	001189-01
Date Analyzed:	01/16/20	Data File:	001189-01.051
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	1.90
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	B-2:Surface	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001189
Date Extracted:	01/16/20	Lab ID:	001189-03
Date Analyzed:	01/16/20	Data File:	001189-03.052
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	2.06
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	B-3:Surface	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001189
Date Extracted:	01/16/20	Lab ID:	001189-05
Date Analyzed:	01/16/20	Data File:	001189-05.061
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	3.11
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	B-4:Surface	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001189
Date Extracted:	01/16/20	Lab ID:	001189-07
Date Analyzed:	01/16/20	Data File:	001189-07.062
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	3.94
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	B-5:Surface	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001189
Date Extracted:	01/16/20	Lab ID:	001189-09
Date Analyzed:	01/16/20	Data File:	001189-09.063
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	2.59
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015397, F&BI 001189
Date Extracted:	01/16/20	Lab ID:	I0-032 mb2
Date Analyzed:	01/16/20	Data File:	I0-032 mb2.044
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	B-1:Surface	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001189
Date Extracted:	01/16/20	Lab ID:	001189-01
Date Analyzed:	01/16/20	Data File:	011616.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	113	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	B-2:Surface	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001189
Date Extracted:	01/16/20	Lab ID:	001189-03
Date Analyzed:	01/16/20	Data File:	011617.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	50	150
Toluene-d8	87	50	150
4-Bromofluorobenzene	101	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	B-3:Surface	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001189
Date Extracted:	01/16/20	Lab ID:	001189-05
Date Analyzed:	01/16/20	Data File:	011618.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	50	150
Toluene-d8	92	50	150
4-Bromofluorobenzene	108	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	B-4:Surface	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001189
Date Extracted:	01/16/20	Lab ID:	001189-07
Date Analyzed:	01/16/20	Data File:	011619.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	89	50	150
4-Bromofluorobenzene	98	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	B-5:Surface	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001189
Date Extracted:	01/16/20	Lab ID:	001189-09
Date Analyzed:	01/16/20	Data File:	011620.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	109	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	110	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015397, F&BI 001189
Date Extracted:	01/16/20	Lab ID:	00-0134 mb
Date Analyzed:	01/16/20	Data File:	011611.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	50	150
Toluene-d8	88	50	150
4-Bromofluorobenzene	92	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/21/20

Date Received: 01/15/20

Project: 015397, F&BI 001189

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 001179-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	1.94	81	83	75-125	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	86	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/21/20

Date Received: 01/15/20

Project: 015397, F&BI 001189

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260D DIRECT SPARGE**

Laboratory Code: 001189-07 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet wt)	Duplicate Result (Wet wt)	RPD (Limit 20)
1,2-Dibromoethane (EDB)	mg/kg (ppm)	<0.005	<0.005	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
1,2-Dibromoethane (EDB)	mg/kg (ppm)	0.05	107	117	70-130	9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



Fremont
Analytical

3600 Fremont Ave. N.

Seattle, WA 98103

T: (206) 352-3790

F: (206) 352-7178

info@fremontanalytical.com

Friedman & Bruya

Michael Erdahl

3012 16th Ave. W.

Seattle, WA 98119

RE: 001189

Work Order Number: 2001240

January 17, 2020

Attention Michael Erdahl:

Fremont Analytical, Inc. received 10 sample(s) on 1/16/2020 for the analyses presented in the following report.

Ion Chromatography by EPA Method 300.0

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample Moisture (Percent Moisture)

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

DoD/ELAP Certification #L17-135, ISO/IEC 17025:2005
ORELAP Certification: WA 100009-007 (NELAP Recognized)

CLIENT: Friedman & Bruya
Project: 001189
Work Order: 2001240

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2001240-001	B-1:Surface	01/15/2020 8:30 AM	01/16/2020 10:15 AM
2001240-002	B-1:2	01/15/2020 8:40 AM	01/16/2020 10:15 AM
2001240-003	B-2:Surface	01/15/2020 9:40 AM	01/16/2020 10:15 AM
2001240-004	B-2:2	01/15/2020 9:50 AM	01/16/2020 10:15 AM
2001240-005	B-3:Surface	01/15/2020 10:40 AM	01/16/2020 10:15 AM
2001240-006	B-3:2	01/15/2020 10:45 AM	01/16/2020 10:15 AM
2001240-007	B-4:Surface	01/15/2020 11:50 AM	01/16/2020 10:15 AM
2001240-008	B-4:2	01/15/2020 11:55 AM	01/16/2020 10:15 AM
2001240-009	B-5:Surface	01/15/2020 12:55 PM	01/16/2020 10:15 AM
2001240-010	B-5:2	01/15/2020 1:00 PM	01/16/2020 10:15 AM

CLIENT: Friedman & Bruya
Project: 001189

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 2001240
Date Reported: 1/17/2020

CLIENT: Friedman & Bruya
Project: 001189

Lab ID: 2001240-001

Client Sample ID: B-1:Surface

Collection Date: 1/15/2020 8:30:00 AM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Organophosphorus Pesticides by EPA Method 8270-SIM</u>				Batch ID: 27152		Analyst: SB
Diazinon	ND	484		µg/Kg-dry	1	1/17/2020 10:43:33 AM
Surr: Triphenylphosphate	90.0	10.7 - 154		%Rec	1	1/17/2020 10:43:33 AM

Ion Chromatography by EPA Method 300.0

Batch ID: 27156 Analyst: SS

Nitrate (as N)	ND	1.05		mg/Kg-dry	1	1/16/2020 9:48:00 PM
Orthophosphate (as P)	ND	2.10		mg/Kg-dry	1	1/16/2020 9:48:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R56689 Analyst: CJ

Percent Moisture	4.75	0.500		wt%	1	1/16/2020 11:32:46 AM
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Lab ID: 2001240-003

Client Sample ID: B-2:Surface

Collection Date: 1/15/2020 9:40:00 AM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Organophosphorus Pesticides by EPA Method 8270-SIM</u>				Batch ID: 27152		Analyst: SB
Diazinon	ND	537		µg/Kg-dry	1	1/17/2020 11:05:54 AM
Surr: Triphenylphosphate	73.2	10.7 - 154		%Rec	1	1/17/2020 11:05:54 AM

Ion Chromatography by EPA Method 300.0

Batch ID: 27156 Analyst: SS

Nitrate (as N)	ND	1.11		mg/Kg-dry	1	1/16/2020 10:34:00 PM
Orthophosphate (as P)	ND	2.23		mg/Kg-dry	1	1/16/2020 10:34:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R56689 Analyst: CJ

Percent Moisture	10.3	0.500		wt%	1	1/16/2020 11:32:46 AM
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Work Order: 2001240
Date Reported: 1/17/2020

CLIENT: Friedman & Bruya
Project: 001189

Lab ID: 2001240-005

Client Sample ID: B-3:Surface

Collection Date: 1/15/2020 10:40:00 AM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27152

Analyst: SB

Diazinon	ND	516		µg/Kg-dry	1	1/17/2020 11:28:07 AM
Surr: Triphenylphosphate	80.5	10.7 - 154		%Rec	1	1/17/2020 11:28:07 AM

Ion Chromatography by EPA Method 300.0

Batch ID: 27156

Analyst: SS

Nitrate (as N)	ND	1.04		mg/Kg-dry	1	1/16/2020 10:57:00 PM
Orthophosphate (as P)	ND	2.08		mg/Kg-dry	1	1/16/2020 10:57:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R56689

Analyst: CJ

Percent Moisture	5.01	0.500		wt%	1	1/16/2020 11:32:46 AM
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Lab ID: 2001240-007

Client Sample ID: B-4:Surface

Collection Date: 1/15/2020 11:50:00 AM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27152

Analyst: SB

Diazinon	ND	451		µg/Kg-dry	1	1/17/2020 11:50:31 AM
Surr: Triphenylphosphate	85.9	10.7 - 154		%Rec	1	1/17/2020 11:50:31 AM

Ion Chromatography by EPA Method 300.0

Batch ID: 27156

Analyst: SS

Nitrate (as N)	ND	1.05		mg/Kg-dry	1	1/16/2020 11:20:00 PM
Orthophosphate (as P)	ND	2.09		mg/Kg-dry	1	1/16/2020 11:20:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R56689

Analyst: CJ

Percent Moisture	4.41	0.500		wt%	1	1/16/2020 11:32:46 AM
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Analytical Report

Work Order: 2001240
Date Reported: 1/17/2020

CLIENT: Friedman & Bruya

Project: 001189

Lab ID: 2001240-009

Client Sample ID: B-5:Surface

Collection Date: 1/15/2020 12:55:00 PM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Organophosphorus Pesticides by EPA Method 8270-SIM</u>				Batch ID: 27152		Analyst: SB
Diazinon	ND	449		µg/Kg-dry	1	1/17/2020 12:12:57 PM
Surr: Triphenylphosphate	80.7	10.7 - 154		%Rec	1	1/17/2020 12:12:57 PM
<u>Ion Chromatography by EPA Method 300.0</u>				Batch ID: 27156		Analyst: SS
Nitrate (as N)	ND	1.06		mg/Kg-dry	1	1/17/2020 12:30:00 AM
Orthophosphate (as P)	ND	2.11		mg/Kg-dry	1	1/17/2020 12:30:00 AM
<u>Sample Moisture (Percent Moisture)</u>				Batch ID: R56689		Analyst: CJ
Percent Moisture	5.90	0.500		wt%	1	1/16/2020 11:32:46 AM

Work Order: 2001240
CLIENT: Friedman & Bruya
Project: 001189

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: MB-27156		SampType: MBLK			Units: mg/Kg		Prep Date: 1/16/2020			RunNo: 56716		
Client ID: MBLKS		Batch ID: 27156			Analysis Date: 1/16/2020					SeqNo: 1129894		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	ND	1.00									
Orthophosphate (as P)	ND	2.00									

Sample ID: LCS-27156		SampType: LCS			Units: mg/Kg		Prep Date: 1/16/2020			RunNo: 56716		
Client ID: LCSS		Batch ID: 27156			Analysis Date: 1/16/2020			SeqNo: 1129895				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	7.94	1.00	7.500	0	106	90	110				
Orthophosphate (as P)	12.7	2.00	12.50	0	102	90	110				

Sample ID: 2001240-001ADUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 1/16/2020			RunNo: 56716		
Client ID: B-1:Surface		Batch ID: 27156					Analysis Date: 1/16/2020			SeqNo: 1129897	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Nitrate (as N)	ND	1.04						0		30	
Orthophosphate (as P)	ND	2.09						0		30	

Sample ID: 2001240-007AMS	SampType: MS	Units: mg/Kg-dry			Prep Date: 1/16/2020			RunNo: 56716			
Client ID: B-4:Surface	Batch ID: 27156				Analysis Date: 1/16/2020			SeqNo: 1129901			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Nitrate (as N)	8.20	1.04	7.831	0	105	80	120				
Orthophosphate (as P)	2.28	2.09	13.05	0	17.4	80	120				S

NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Work Order: 2001240
CLIENT: Friedman & Bruya
Project: 001189

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: 2001240-007AMSD		SampType: MSD		Units: mg/Kg-dry		Prep Date: 1/16/2020			RunNo: 56716		
Client ID: B-4:Surface		Batch ID: 27156		Analysis Date: 1/17/2020					SeqNo: 1129902		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	8.16	1.04	7.774	0	105	80	120	8.196	0.471	30	
Orthophosphate (as P)	ND	2.07	12.96	0	14.6	80	120	2.276	18.7	30	S

NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Work Order: 2001240

CLIENT: Friedman & Bruya

Project: 001189

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: MB-27152		SampType: MBLK		Units: µg/Kg		Prep Date: 1/16/2020			RunNo: 56725			
Client ID: MBLKS		Batch ID: 27152					Analysis Date: 1/17/2020			SeqNo: 1130103		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	500									
Surr: Triphenylphosphate	219		200.0		109	10.7	154				

Sample ID: LCS-27152		SampType: LCS			Units: µg/Kg		Prep Date: 1/16/2020			RunNo: 56725		
Client ID: LCSS		Batch ID: 27152						Analysis Date: 1/17/2020			SeqNo: 1130104	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	198	500	200.0	0	99.1	37.1	132				
Surr: Triphenylphosphate	227		200.0		114	10.7	154				

Client Name: **FB**
 Logged by: **Carissa True**

Work Order Number: **2001240**
 Date Received: **1/16/2020 10:15:00 AM**

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
 2. How was the sample delivered? FedEx

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
 4. Shipping container/cooler in good condition? Yes ☒ No ☐
 5. Custody Seals present on shipping container/cooler?
 (Refer to comments for Custody Seals not intact) Yes ☐ No ☒ Not Required ☐
 6. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
 7. Were all items received at a temperature of $>0^{\circ}\text{C}$ to 10.0°C * Yes ☒ No ☐ NA ☐
 8. Sample(s) in proper container(s)? Yes ☒ No ☐
 9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
 10. Are samples properly preserved? Yes ☒ No ☐
 11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
 12. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
 13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
 14. Does paperwork match bottle labels? Yes ☒ No ☐
 15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
 16. Is it clear what analyses were requested? Yes ☒ No ☐
 17. Were all holding times able to be met? Yes ☒ No ☐

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:

Item Information

Item #	Temp °C
Cooler 1	4.8
Sample 1	4.8

* Note: DoD/ELAP and TNI require items to be received at $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

2001240

Page 12 of 12

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 3012 16th Ave W

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 Fax # (206) 283-5044

SUBCONTRACTOR

Fremont

PROJECT NAME/NO.

001189

PO #

A-531

REMARKS

Please Email Results

Page # 1 of 1

TURNAROUND TIME

☐ Standard (2 Weeks)

☒ RUSH 24 hour

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☐ Return samples

☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED										Notes
						Dioxins/Furans	EPH	VPH	Diazinon	Nitrate	Phosphate					
B-1: Surface		1/15/20	0830	Soil	1											
B-1: 2			0840		1				X	X	X					
B-2: Surface			0940		1				X	X	X					Hold
B-2: 2			0950		1				X	X	X					
B-3: Surface			1040		1				X	X	X					Hold
B-3: 2			1045		1				X	X	X					
B-4: Surface			1150		1				X	X	X					Hold
B-4: 2			1155		1				X	X	X					
B-5: Surface			1255		1				X	X	X					Hold
B-5: 2			1300		1				X	X	X					Hold

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE

Relinquished by:

Received by:

Relinquished by:

Received by:

PRINT NAME

Michael Erdahl

Carter Johnson

COMPANY

Friedman & Bruya

FAI

DATE

1/16/20

1/16/20

TIME

0730AM

1015

001189

SAMPLE CHAIN OF CUSTODY

ME 01-15-20

VSH VS3
1 of 1
A05Report To Charles McFadden / Thom MartinCompany TRCAddress 1180 NW Maple St.City, State, ZIP Issaquah, WA 98027Phone 425-395-0060 Email cmcfadden@trccompanies.com

SAMPLERS (signature)

Charles McFadden / Joe Sherrad

PROJECT NAME

015397(Brookdale)

PO #

015397

REMARKS

Rush TAT (24hr)

INVOICE TO

TRC

Project specific RLs? - Yes / No

Page # 1 of 1

TURNAROUND TIME

☐ Standard turnaround☒ RUSH 24 hr TAT

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Archive samples☐ Other

Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Nitrates + Phosphates	As	Ethylene Dichloride (EDC)	Diazion	
B-1: Surface	01A.F	1/15/20	0830	Soil	6								X	X	X	X	
B-1:2	02		0840														
B-2: Surface	03		0940										X	X	X	X	
B-2:2	04		950														
B-3: Surface	05		1040										X	X	X	X	
B-3:2	06		1045														
B-4: Surface	07		1150										X	X	X	X	
B-4:2	08		1155														
B-5: surface	09		1255										X	X	X	X	
B-5:2	10		1300														

Samples received at 5 °C

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	Joe Sherrad	TRC	1/15/20	1558
Received by: <u>[Signature]</u>	Isaac Lessig	FBI	1/15/20	15:58
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

February 4, 2020

Charles McFadden, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 015397, F&BI 001190

Dear Mr McFadden:

Included is the amended report from the testing of material submitted on January 15, 2020 from the 015397, F&BI 001190 project. Per your request, the dieldrin results were reported down to the method detection limit.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Thom Morin
TRC0121R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
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www.friedmanandbruya.com

January 21, 2020

Charles McFadden, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 015397, F&BI 001190

Dear Mr McFadden:

Included are the results from the testing of material submitted on January 15, 2020 from the 015397, F&BI 001190 project. There are 25 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Thom Morin
TRC0121R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on January 15, 2020 by Friedman & Bruya, Inc. from the Environmental Partners 015397, F&BI 001190 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
001190 -01	B-1:GW
001190 -02	B-2:GW
001190 -03	B-3:GW
001190 -04	B-4:GW
001190 -05	B-5:GW

The dissolved metals samples were filtered at Friedman and Bruya on January 16, 2020 at 13:32. The data were flagged accordingly.

The 8081 surrogate TCMX failed below the acceptance criteria in the method blank. The data were flagged accordingly.

Sediment was present in the total metals 6020B samples B-1:GW, B-3:GW, B-4:GW, and B-5:GW. The total arsenic concentration is likely biased high due to interference from the sediment.

The samples were sent to Fremont Analytical for nitrate, phosphate, and organophosphorus pesticide diazinon analyses. The report is enclosed.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	B-1:GW f	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001190
Date Extracted:	01/16/20	Lab ID:	001190-01
Date Analyzed:	01/16/20	Data File:	001190-01.101
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	B-2:GW f	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001190
Date Extracted:	01/16/20	Lab ID:	001190-02
Date Analyzed:	01/16/20	Data File:	001190-02.102
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	B-3:GW f	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001190
Date Extracted:	01/16/20	Lab ID:	001190-03
Date Analyzed:	01/16/20	Data File:	001190-03.103
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	B-4:GW f	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001190
Date Extracted:	01/16/20	Lab ID:	001190-04
Date Analyzed:	01/16/20	Data File:	001190-04.107
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	B-5:GW f	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001190
Date Extracted:	01/16/20	Lab ID:	001190-05
Date Analyzed:	01/16/20	Data File:	001190-05.108
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	Method Blank f	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015397, F&BI 001190
Date Extracted:	01/16/20	Lab ID:	I0-034 mb
Date Analyzed:	01/16/20	Data File:	I0-034 mb.093
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	B-1:GW	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001190
Date Extracted:	01/16/20	Lab ID:	001190-01
Date Analyzed:	01/16/20	Data File:	001190-01.056
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	9.68
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	B-2:GW	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001190
Date Extracted:	01/16/20	Lab ID:	001190-02
Date Analyzed:	01/16/20	Data File:	001190-02.057
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	1.22
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	B-3:GW	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001190
Date Extracted:	01/16/20	Lab ID:	001190-03
Date Analyzed:	01/16/20	Data File:	001190-03.058
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	73.1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	B-4:GW	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001190
Date Extracted:	01/16/20	Lab ID:	001190-04
Date Analyzed:	01/16/20	Data File:	001190-04.059
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	33.5
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	B-5:GW	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001190
Date Extracted:	01/16/20	Lab ID:	001190-05
Date Analyzed:	01/16/20	Data File:	001190-05.060
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	53.4
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015397, F&BI 001190
Date Extracted:	01/16/20	Lab ID:	I0-033 mb
Date Analyzed:	01/16/20	Data File:	I0-033 mb.040
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	B-1:GW	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001190
Date Extracted:	01/16/20	Lab ID:	001190-01
Date Analyzed:	01/16/20	Data File:	011619.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	53	50	150
DBC	76	50	150

Compounds:	Concentration ug/L
Dieldrin	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	B-2:GW	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001190
Date Extracted:	01/16/20	Lab ID:	001190-02
Date Analyzed:	01/16/20	Data File:	011620.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	57	50	150
DBC	78	50	150

Compounds:	Concentration ug/L
Dieldrin	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	B-3:GW	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001190
Date Extracted:	01/16/20	Lab ID:	001190-03
Date Analyzed:	01/16/20	Data File:	011621.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	39 ip	50	150
DBC	63	50	150

Compounds:	Concentration ug/L
Dieldrin	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	B-4:GW	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001190
Date Extracted:	01/16/20	Lab ID:	001190-04
Date Analyzed:	01/16/20	Data File:	011622.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	52	50	150
DBC	63	50	150

Compounds:	Concentration ug/L
Dieldrin	0.032

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	B-5:GW	Client:	Environmental Partners
Date Received:	01/15/20	Project:	015397, F&BI 001190
Date Extracted:	01/16/20	Lab ID:	001190-05
Date Analyzed:	01/16/20	Data File:	011623.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	54	50	150
DBC	59	50	150

Compounds:	Concentration ug/L
Dieldrin	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015397, F&BI 001190
Date Extracted:	01/16/20	Lab ID:	00-156 mb2
Date Analyzed:	01/16/20	Data File:	011618.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	48 vo	50	150
DBC	75	50	150

Compounds:	Concentration ug/L
Dieldrin	<0.02 js

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/21/20
Date Received: 01/15/20
Project: 015397, F&BI 001190
Date Extracted: 01/16/20
Date Analyzed: 01/16/20

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR 1,2-DIBROMOETHANE (EDB) BY EPA METHOD 8011 MODIFIED**
Results Reported as µg/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>EDB</u>
B-1:GW 001190-01	<0.01
B-2:GW 001190-02	<0.01
B-3:GW 001190-03	<0.01
B-4:GW 001190-04	<0.01
B-5:GW 001190-05	<0.01
Method Blank	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/21/20

Date Received: 01/15/20

Project: 015397, F&BI 001190

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR DISSOLVED METALS USING EPA METHOD 6020B**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	94	95	80-120	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/21/20

Date Received: 01/15/20

Project: 015397, F&BI 001190

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 001037-28 x10 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	37.9	108	118	75-125	9

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	95	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/21/20

Date Received: 01/15/20

Project: 015397, F&BI 001190

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	ug/L (ppb)	0.25	83	78	70-130	6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/21/20

Date Received: 01/15/20

Project: 015397, F&BI 001190

**QUALITY ASSURANCE RESULTS
FROM THE ANALYSIS OF WATER SAMPLES FOR
1,2-DIBROMOETHANE (EDB) BY EPA METHOD 8011 MODIFIED**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	Percent	Acceptance Criteria	RPD (Limit 10)
			Recovery LCS	Recovery LCSD		
1,2-Dibromoethane	ug/L (ppb)	0.10	98	103	70-130	6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



Fremont
Analytical

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Friedman & Bruya
Michael Erdahl
3012 16th Ave. W.
Seattle, WA 98119

RE: 001190
Work Order Number: 2001241

January 17, 2020

Attention Michael Erdahl:

Fremont Analytical, Inc. received 5 sample(s) on 1/16/2020 for the analyses presented in the following report.

Ion Chromatography by EPA Method 300.0
Organophosphorus Pesticides by EPA Method 8270-SIM

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

DoD/ELAP Certification #L17-135, ISO/IEC 17025:2005
ORELAP Certification: WA 100009-007 (NELAP Recognized)

Original

www.fremontanalytical.com



Date: 01/17/2020

CLIENT: Friedman & Bruya
Project: 001190
Work Order: 2001241

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2001241-001	B-1:GW	01/15/2020 9:10 AM	01/16/2020 10:15 AM
2001241-002	B-2:GW	01/15/2020 10:05 AM	01/16/2020 10:15 AM
2001241-003	B-3:GW	01/15/2020 11:15 AM	01/16/2020 10:15 AM
2001241-004	B-4:GW	01/15/2020 12:20 PM	01/16/2020 10:15 AM
2001241-005	B-5:GW	01/15/2020 1:30 PM	01/16/2020 10:15 AM

CLIENT: Friedman & Bruya
Project: 001190

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 2001241
Date Reported: 1/17/2020

CLIENT: Friedman & Bruya
Project: 001190

Lab ID: 2001241-001

Client Sample ID: B-1:GW

Collection Date: 1/15/2020 9:10:00 AM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27157

Analyst: SB

Diazinon	ND	0.197		µg/L	1	1/17/2020 1:42:58 PM
Surr: Triphenylphosphate	104	10 - 132		%Rec	1	1/17/2020 1:42:58 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27155

Analyst: SS

Nitrate (as N)	1.20	0.100		mg/L	1	1/16/2020 5:11:00 PM
Ortho-Phosphate (as P)	ND	0.200		mg/L	1	1/16/2020 5:11:00 PM

Lab ID: 2001241-002

Client Sample ID: B-2:GW

Collection Date: 1/15/2020 10:05:00 AM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27157

Analyst: SB

Diazinon	ND	0.197		µg/L	1	1/17/2020 2:27:38 PM
Surr: Triphenylphosphate	113	10 - 132		%Rec	1	1/17/2020 2:27:38 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27155

Analyst: SS

Nitrate (as N)	1.18	0.100		mg/L	1	1/16/2020 5:57:00 PM
Ortho-Phosphate (as P)	ND	0.200		mg/L	1	1/16/2020 5:57:00 PM



Analytical Report

Work Order: 2001241
Date Reported: 1/17/2020

CLIENT: Friedman & Bruya
Project: 001190

Lab ID: 2001241-003

Client Sample ID: B-3:GW

Collection Date: 1/15/2020 11:15:00 AM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27157

Analyst: SB

Diazinon	ND	0.199		µg/L	1	1/17/2020 2:49:31 PM
Surr: Triphenylphosphate	121	10 - 132		%Rec	1	1/17/2020 2:49:31 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27155

Analyst: SS

Nitrate (as N)	0.638	0.100		mg/L	1	1/16/2020 7:06:00 PM
Ortho-Phosphate (as P)	ND	0.200		mg/L	1	1/16/2020 7:06:00 PM

Lab ID: 2001241-004

Client Sample ID: B-4:GW

Collection Date: 1/15/2020 12:20:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27157

Analyst: SB

Diazinon	ND	0.197		µg/L	1	1/17/2020 3:11:50 PM
Surr: Triphenylphosphate	86.4	10 - 132		%Rec	1	1/17/2020 3:11:50 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27155

Analyst: SS

Nitrate (as N)	2.26	0.100		mg/L	1	1/16/2020 7:29:00 PM
Ortho-Phosphate (as P)	ND	0.200		mg/L	1	1/16/2020 7:29:00 PM



Analytical Report

Work Order: 2001241
Date Reported: 1/17/2020

CLIENT: Friedman & Bruya
Project: 001190

Lab ID: 2001241-005

Client Sample ID: B-5:GW

Collection Date: 1/15/2020 1:30:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27157

Analyst: SB

Diazinon	ND	0.198		µg/L	1	1/17/2020 3:34:15 PM
Surr: Triphenylphosphate	129	10 - 132		%Rec	1	1/17/2020 3:34:15 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27155

Analyst: SS

Nitrate (as N)	2.56	0.200	D	mg/L	2	1/17/2020 11:01:00 AM
Ortho-Phosphate (as P)	ND	0.200		mg/L	1	1/16/2020 7:52:00 PM



Date: 1/17/2020

Work Order: 2001241
CLIENT: Friedman & Bruya
Project: 001190

QC SUMMARY REPORT
Ion Chromatography by EPA Method 300.0

Sample ID: MB-27155	SampType: MBLK	Units: mg/L		Prep Date: 1/16/2020	RunNo: 56717
Client ID: MBLKW	Batch ID: 27155	Analysis Date: 1/16/2020		SeqNo: 1129908	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrate (as N)	ND	0.100
Ortho-Phosphate (as P)	ND	0.200

Sample ID: LCS-27155	SampType: LCS	Units: mg/L		Prep Date: 1/16/2020	RunNo: 56717
Client ID: LCSW	Batch ID: 27155	Analysis Date: 1/16/2020		SeqNo: 1129909	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrate (as N)	0.740	0.100	0.7500	0	98.7	90	110
Ortho-Phosphate (as P)	1.21	0.200	1.250	0	97.0	90	110

Sample ID: 2001241-001ADUP	SampType: DUP	Units: mg/L		Prep Date: 1/16/2020	RunNo: 56717
Client ID: B-1:GW	Batch ID: 27155	Analysis Date: 1/16/2020		SeqNo: 1129911	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrate (as N)	1.20	0.100				1.197	0.417	20
Ortho-Phosphate (as P)	ND	0.200				0		20

Sample ID: 2001241-002AMS	SampType: MS	Units: mg/L		Prep Date: 1/16/2020	RunNo: 56717
Client ID: B-2:GW	Batch ID: 27155	Analysis Date: 1/16/2020		SeqNo: 1129913	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrate (as N)	2.00	0.100	0.7500	1.179	109	80	120
Ortho-Phosphate (as P)	1.12	0.200	1.250	0	89.8	80	120

Sample ID: 2001241-002AMSD	SampType: MSD	Units: mg/L		Prep Date: 1/16/2020	RunNo: 56717
Client ID: B-2:GW	Batch ID: 27155	Analysis Date: 1/16/2020		SeqNo: 1129914	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrate (as N)	1.99	0.100	0.7500	1.179	108	80	120	1.997	0.251	20
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Original



Date: 1/17/2020

Work Order: 2001241
CLIENT: Friedman & Bruya
Project: 001190

QC SUMMARY REPORT
Ion Chromatography by EPA Method 300.0

Sample ID: 2001241-002AMSD	SampType: MSD	Units: mg/L				Prep Date: 1/16/2020			RunNo: 56717		
Client ID: B-2:GW	Batch ID: 27155	Analysis Date: 1/16/2020						SeqNo: 1129914			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ortho-Phosphate (as P)	1.16	0.200	1.250	0	92.7	80	120	1.123	3.16	20	

Work Order: 2001241
CLIENT: Friedman & Bruya
Project: 001190

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: MB-27157		SampType: MBLK		Units: µg/L		Prep Date: 1/16/2020			RunNo: 56726			
Client ID: MBLKW		Batch ID: 27157					Analysis Date: 1/17/2020			SeqNo: 1130114		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	0.198									
Surr: Triphenylphosphate	0.540		0.3959		136	10	132				S

NOTES:

S - Outlying surrogate recovery(ies) observed (high bias). Sample is non-detect; no further action required.

Sample ID: LCS-27157		SampType: LCS		Units: µg/L		Prep Date: 1/16/2020			RunNo: 56726			
Client ID: LCSW		Batch ID: 27157					Analysis Date: 1/17/2020			SeqNo: 1130115		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	2.00	0.198	1.975	0	101	26.5	127				
Surr: Triphenylphosphate	0.458		0.3951		116	10	132				

Sample ID: LCSD-27157	SampType: LCSD	Units: µg/L			Prep Date: 1/16/2020				RunNo: 56726		
Client ID: LCSW02	Batch ID: 27157	Analysis Date: 1/17/2020							SeqNo: 1130116		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diazinon	2.13	0.198	1.980	0	108	26.5	127	2.000	6.42	30	
Surr: Triphenylphosphate	0.440		0.3961		111	10	132		0		

Sample ID: 2001241-001BDUP		SampType: DUP			Units: µg/L		Prep Date: 1/16/2020			RunNo: 56726		
Client ID: B-1:GW		Batch ID: 27157			Analysis Date: 1/17/2020			SeqNo: 1130118				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	0.234						0		30	
Surr: Triphenylphosphate	0.448		0.4686		95.5	10	132		0		

Client Name: **FB**
 Logged by: **Brianna Barnes**

Work Order Number: **2001241**
 Date Received: **1/16/2020 10:15:00 AM**

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
 2. How was the sample delivered? FedEx

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
 4. Shipping container/cooler in good condition? Yes ☒ No ☐
 5. Custody Seals present on shipping container/cooler?
 (Refer to comments for Custody Seals not intact) Yes ☐ No ☒ Not Required ☐
 6. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
 7. Were all items received at a temperature of $>0^{\circ}\text{C}$ to 10.0°C * Yes ☒ No ☐ NA ☐
 8. Sample(s) in proper container(s)? Yes ☒ No ☐
 9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
 10. Are samples properly preserved? Yes ☒ No ☐
 11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
 12. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
 13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
 14. Does paperwork match bottle labels? Yes ☒ No ☐
 15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
 16. Is it clear what analyses were requested? Yes ☒ No ☐
 17. Were all holding times able to be met? Yes ☒ No ☐

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:

Item Information

Item #	Temp °C
Cooler 1	4.8
Sample 1	4.8

* Note: DoD/ELAP and TNI require items to be received at $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$

2001241

Phone # (206) 285-8282 Fax # (206) 283-5044

Fremont

PO #

001190

A-531

Please Email Results

TURNAROUND TIME

~~BRUSH~~ 24 hour

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructionsPage 12 of 12

Carter Johnson

FAT

1/16/70

1/16/20

07:30 AM.

1015

001190

SAMPLE CHAIN OF CUSTODY

1.15.20

ME VW/AOS/AIS

Report To

Charles McAden / Thom March

Company

TRC

Address

1180 NW Maple St.

City, State, ZIP

Issaquah, WA 98027

Phone

425-3950010 Email: cmcadden@trccompanies.com

SAMPLERS (signature)

Charles McAden / Joe Sherrod

PROJECT NAME

015397

PO #

015397

(Brookdale)

REMARKS

Rush 24hr TAT

INVOICE TO

TRC

Project specific RLs? - Yes / No

Page # 1 of 1

TURNAROUND TIME

☐ Standard turnaround
☒ RUSH 24hr TAT
 Rush charges authorized by:

SAMPLE DISPOSAL

☐ Archive samples
☐ Other
 Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED												Notes
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Nitrates + Phosphates	As (Total + dissolved)	Ethylene Dibromide (EDB)	Dioxin + Dieldrin		
B-1: GW	01A-H	1/15/20	0900	H ₂ O	8								X	X	X	X		
B-2: GW	02A-H		1005										X	X	X	X		
B-3: GW	03A-H		1115										X	X	X	X		
B-4: GW	04A-H		1220										X	X	X	X		
B-5: GW	05A-H	↓	1330	↓	↓								X	X	X	X		

Samples received at 5 °C


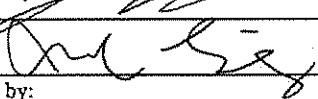
Samples received at 5 °C

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Joe Sherrod	TRC	1/15/20	1558
Received by: 	Isaac Lessig	FBI	1/15/20	1558
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

January 27, 2020

Charles McFadden, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 015397 (Brookdale), F&BI 001212

Dear Mr McFadden:

Included are the results from the testing of material submitted on January 16, 2020 from the 015397 (Brookdale), F&BI 001212 project. There are 17 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Thom Morin
TRC0127R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on January 16, 2020 by Friedman & Bruya, Inc. from the Environmental Partners 015397 (Brookdale), F&BI 001212 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
001212 -01	B-6:Surface
001212 -02	B-6:2
001212 -03	B-7:Surface
001212 -04	B-7:2
001212 -05	B-8:Surface
001212 -06	B-8:2
001212 -07	B-9:Surface
001212 -08	B-9:2

Samples B-6:Surface, B-7:Surface, B-8:Surface, and B-9:Surface were sent to Fremont Analytical for nitrate, phosphate, and organophosphorus pesticide diazinon analyses. The report is enclosed.

The 8260D internal standard in sample B-9:Surface did not pass the acceptance criteria. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	B-6:Surface	Client:	Environmental Partners
Date Received:	01/16/20	Project:	015397 (Brookdale), F&BI 001212
Date Extracted:	01/17/20	Lab ID:	001212-01
Date Analyzed:	01/17/20	Data File:	011716.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	50	150
Toluene-d8	106	50	150
4-Bromofluorobenzene	94	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	B-7:Surface	Client:	Environmental Partners
Date Received:	01/16/20	Project:	015397 (Brookdale), F&BI 001212
Date Extracted:	01/17/20	Lab ID:	001212-03
Date Analyzed:	01/20/20	Data File:	012015.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	94	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	B-8:Surface	Client:	Environmental Partners
Date Received:	01/16/20	Project:	015397 (Brookdale), F&BI 001212
Date Extracted:	01/17/20	Lab ID:	001212-05
Date Analyzed:	01/20/20	Data File:	012016.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	98	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	B-9:Surface	Client:	Environmental Partners
Date Received:	01/16/20	Project:	015397 (Brookdale), F&BI 001212
Date Extracted:	01/17/20	Lab ID:	001212-07
Date Analyzed:	01/20/20	Data File:	012017.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	50	150
Toluene-d8	92 J	50	150
4-Bromofluorobenzene	108 J	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005 J

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015397 (Brookdale), F&BI 001212
Date Extracted:	01/17/20	Lab ID:	00-0144 mb
Date Analyzed:	01/17/20	Data File:	011713.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	91 J	50	150
Toluene-d8	99 J	50	150
4-Bromofluorobenzene	92 J	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005 J

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	B-6:Surface	Client:	Environmental Partners
Date Received:	01/16/20	Project:	015397 (Brookdale), F&BI 001212
Date Extracted:	01/17/20	Lab ID:	001212-01
Date Analyzed:	01/17/20	Data File:	001212-01.100
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	3.97
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	B-7:Surface	Client:	Environmental Partners
Date Received:	01/16/20	Project:	015397 (Brookdale), F&BI 001212
Date Extracted:	01/17/20	Lab ID:	001212-03
Date Analyzed:	01/17/20	Data File:	001212-03.101
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	55.0
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	B-7:2	Client:	Environmental Partners
Date Received:	01/16/20	Project:	015397 (Brookdale), F&BI 001212
Date Extracted:	01/21/20	Lab ID:	001212-04
Date Analyzed:	01/21/20	Data File:	001212-04.045
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	111
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	B-8:Surface	Client:	Environmental Partners
Date Received:	01/16/20	Project:	015397 (Brookdale), F&BI 001212
Date Extracted:	01/17/20	Lab ID:	001212-05
Date Analyzed:	01/17/20	Data File:	001212-05.102
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	2.12
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	B-9:Surface	Client:	Environmental Partners
Date Received:	01/16/20	Project:	015397 (Brookdale), F&BI 001212
Date Extracted:	01/17/20	Lab ID:	001212-07
Date Analyzed:	01/17/20	Data File:	001212-07.103
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	2.57
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015397 (Brookdale), F&BI 001212
Date Extracted:	01/17/20	Lab ID:	I0-036 mb
Date Analyzed:	01/17/20	Data File:	I0-036 mb.090
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015397 (Brookdale), F&BI 001212
Date Extracted:	01/21/20	Lab ID:	I0-043 mb
Date Analyzed:	01/21/20	Data File:	I0-043 mb.040
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/27/20

Date Received: 01/16/20

Project: 015397 (Brookdale), F&BI 001212

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260D DIRECT SPARGE**

Laboratory Code: 001237-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet wt)	Duplicate Result (Wet wt)	RPD (Limit 20)
1,2-Dibromoethane (EDB)	mg/kg (ppm)	<0.005 J	<0.005 J	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
1,2-Dibromoethane (EDB)	mg/kg (ppm)	0.05	113	104	70-130	8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/27/20

Date Received: 01/16/20

Project: 015397 (Brookdale), F&BI 001212

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 001257-08 x5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	<5	90	93	75-125	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	106	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/27/20

Date Received: 01/16/20

Project: 015397 (Brookdale), F&BI 001212

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 001202-02 x5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	6.05	79	89	75-125	12

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	84	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



Fremont
Analytical

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Friedman & Bruya

Michael Erdahl
3012 16th Ave. W.
Seattle, WA 98119

RE: 001212

Work Order Number: 2001255

January 20, 2020

Attention Michael Erdahl:

Fremont Analytical, Inc. received 8 sample(s) on 1/16/2020 for the analyses presented in the following report.

Ion Chromatography by EPA Method 300.0

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample Moisture (Percent Moisture)

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

DoD/ELAP Certification #L17-135, ISO/IEC 17025:2005
ORELAP Certification: WA 100009-007 (NELAP Recognized)

CLIENT: Friedman & Bruya
Project: 001212
Work Order: 2001255

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2001255-001	B-6: Surface	01/16/2020 8:25 AM	01/16/2020 5:25 PM
2001255-002	B-6:2	01/16/2020 8:30 AM	01/16/2020 5:25 PM
2001255-003	B-7: Surface	01/16/2020 9:25 AM	01/16/2020 5:25 PM
2001255-004	B-7:2	01/16/2020 9:30 AM	01/16/2020 5:25 PM
2001255-005	B-8: Surface	01/16/2020 10:05 AM	01/16/2020 5:25 PM
2001255-006	B-8:2	01/16/2020 10:10 AM	01/16/2020 5:25 PM
2001255-007	B-9: Surface	01/16/2020 11:05 AM	01/16/2020 5:25 PM
2001255-008	B-9:2	01/16/2020 11:10 AM	01/16/2020 5:25 PM

CLIENT: Friedman & Bruya
Project: 001212

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 2001255

Date Reported: 1/20/2020

Client: Friedman & Bruya

Collection Date: 1/16/2020 8:25:00 AM

Project: 001212

Lab ID: 2001255-001

Matrix: Soil

Client Sample ID: B-6: Surface

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27162

Analyst: SB

Diazinon	ND	537		µg/Kg-dry	1	1/17/2020 8:49:10 PM
Surr: Triphenylphosphate	96.9	10.7 - 154		%Rec	1	1/17/2020 8:49:10 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27177

Analyst: SS

Nitrate (as N)	ND	1.07		mg/Kg-dry	1	1/17/2020 11:13:00 PM
Orthophosphate (as P)	ND	2.14		mg/Kg-dry	1	1/17/2020 11:13:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R56723

Analyst: CJ

Percent Moisture	7.12	0.500		wt%	1	1/17/2020 2:53:20 PM
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Analytical Report

Work Order: 2001255

Date Reported: 1/20/2020

Client: Friedman & Bruya

Collection Date: 1/16/2020 9:25:00 AM

Project: 001212

Lab ID: 2001255-003

Matrix: Soil

Client Sample ID: B-7: Surface

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27162

Analyst: SB

Diazinon	ND	503		µg/Kg-dry	1	1/17/2020 10:19:10 PM
Surr: Triphenylphosphate	104	10.7 - 154		%Rec	1	1/17/2020 10:19:10 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27177

Analyst: SS

Nitrate (as N)	ND	1.07		mg/Kg-dry	1	1/17/2020 11:36:00 PM
Orthophosphate (as P)	ND	2.14		mg/Kg-dry	1	1/17/2020 11:36:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R56723

Analyst: CJ

Percent Moisture	7.10	0.500		wt%	1	1/17/2020 2:53:20 PM
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Analytical Report

Work Order: 2001255

Date Reported: 1/20/2020

Client: Friedman & Bruya

Collection Date: 1/16/2020 10:05:00 AM

Project: 001212

Lab ID: 2001255-005

Matrix: Soil

Client Sample ID: B-8: Surface

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27162

Analyst: SB

Diazinon	ND	510		µg/Kg-dry	1	1/17/2020 10:41:36 PM
Surr: Triphenylphosphate	107	10.7 - 154		%Rec	1	1/17/2020 10:41:36 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27177

Analyst: SS

Nitrate (as N)	ND	1.03		mg/Kg-dry	1	1/17/2020 11:59:00 PM
Orthophosphate (as P)	ND	2.06		mg/Kg-dry	1	1/17/2020 11:59:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R56723

Analyst: CJ

Percent Moisture	3.70	0.500		wt%	1	1/17/2020 2:53:20 PM
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Analytical Report

Work Order: 2001255
Date Reported: 1/20/2020

Client: Friedman & Bruya

Collection Date: 1/16/2020 11:05:00 AM

Project: 001212

Lab ID: 2001255-007

Matrix: Soil

Client Sample ID: B-9: Surface

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27162 Analyst: SB

Diazinon	ND	488		µg/Kg-dry	1	1/17/2020 11:04:05 PM
Surr: Triphenylphosphate	94.9	10.7 - 154		%Rec	1	1/17/2020 11:04:05 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27177 Analyst: SS

Nitrate (as N)	1.34	1.06		mg/Kg-dry	1	1/18/2020 12:22:00 AM
Orthophosphate (as P)	ND	2.12		mg/Kg-dry	1	1/18/2020 12:22:00 AM

Sample Moisture (Percent Moisture)

Batch ID: R56723 Analyst: CJ

Percent Moisture	5.81	0.500		wt%	1	1/17/2020 2:53:20 PM
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Work Order: 2001255
CLIENT: Friedman & Bruya
Project: 001212

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: MB-27177		SampType: MBLK		Units: mg/Kg		Prep Date: 1/17/2020			RunNo: 56738			
Client ID: MBLKS		Batch ID: 27177					Analysis Date: 1/17/2020			SeqNo: 1130449		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	ND	1.00									
Orthophosphate (as P)	ND	2.00									

Sample ID: LCS-27177		SampType: LCS			Units: mg/Kg		Prep Date: 1/17/2020			RunNo: 56738		
Client ID: LCSS		Batch ID: 27177			Analysis Date: 1/17/2020					SeqNo: 1130450		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	7.71	1.00	7.500	0	103	90	110				
Orthophosphate (as P)	12.6	2.00	12.50	0	101	90	110				

Sample ID: 2001273-007ADUP		SampType: DUP			Units: mg/Kg-dry		Prep Date: 1/17/2020			RunNo: 56738		
Client ID: BATCH		Batch ID: 27177			Analysis Date: 1/18/2020			SeqNo: 1130461				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	2.01	1.51						2.429	18.6	30	
Orthophosphate (as P)	ND	3.03						0		30	

Sample ID: 2001273-007AMS		SampType: MS			Units: mg/Kg-dry		Prep Date: 1/17/2020		RunNo: 56738		
Client ID: BATCH		Batch ID: 27177			Analysis Date: 1/18/2020				SeqNo: 1130462		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Nitrate (as N)	13.1	1.51	11.35	2.429	93.9	80	120				
Orthophosphate (as P)	ND	3.03	18.92	0	0	80	120				S

NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Work Order: 2001255
CLIENT: Friedman & Bruya
Project: 001212

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: 2001273-007AMSD		SampType: MSD		Units: mg/Kg-dry		Prep Date: 1/17/2020			RunNo: 56738		
Client ID: BATCH		Batch ID: 27177		Analysis Date: 1/18/2020					SeqNo: 1130463		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	13.4	1.53	11.44	2.429	95.7	80	120	13.09	2.15	30	
Orthophosphate (as P)	ND	3.05	19.06	0	14.7	80	120	0		30	S

NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Work Order: 2001255
CLIENT: Friedman & Bruya
Project: 001212

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: MB-27162		SampType: MBLK		Units: µg/Kg		Prep Date: 1/17/2020			RunNo: 56737			
Client ID: MBLKS		Batch ID: 27162					Analysis Date: 1/17/2020			SeqNo: 1130426		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	500									
Surr: Triphenylphosphate	21.3		20.00		107	10.7	154				

Sample ID: LCS-27162		SampType: LCS			Units: µg/Kg		Prep Date: 1/17/2020			RunNo: 56737		
Client ID: LCSS		Batch ID: 27162			Analysis Date: 1/17/2020			SeqNo: 1130427				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	10.3	500	20.00	0	51.4	37.1	132				
Surr: Triphenylphosphate	21.0		20.00		105	10.7	154				

Sample ID: 2001255-001AMS		SampType: MS			Units: µg/Kg-dry		Prep Date: 1/17/2020			RunNo: 56737		
Client ID: B-6: Surface		Batch ID: 27162			Analysis Date: 1/17/2020					SeqNo: 1130429		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	15.4	513	20.53	0	75.0	9.74	142				
Surr: Triphenylphosphate	21.8		20.53		106	10.7	154				

Sample ID: 2001255-001AMSD		SampType: MSD			Units: µg/Kg-dry		Prep Date: 1/17/2020			RunNo: 56737		
Client ID: B-6: Surface		Batch ID: 27162			Analysis Date: 1/17/2020					SeqNo: 1130430		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	16.4	493	19.70	0	83.2	9.74	142	0		30	
Surr: Triphenylphosphate	19.4		19.70		98.6	10.7	154		0		

Sample ID: 2001255-001ADUP		SampType: DUP			Units: µg/Kg-dry		Prep Date: 1/17/2020			RunNo: 56737		
Client ID: B-6: Surface		Batch ID: 27162			Analysis Date: 1/17/2020					SeqNo: 1130431		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	469						0		30	
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Work Order: 2001255

CLIENT: Friedman & Bruya

Project: 001212

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: 2001255-001ADUP	SampType: DUP	Units: µg/Kg-dry			Prep Date: 1/17/2020			RunNo: 56737			
Client ID: B-6: Surface	Batch ID: 27162	Analysis Date: 1/17/2020						SeqNo: 1130431			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Triphenylphosphate	16.4		18.76		87.7	10.7	154		0		

Client Name: **FB**
 Logged by: **Clare Griggs**

Work Order Number: **2001255**
 Date Received: **1/16/2020 5:25:00 PM**

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
 2. How was the sample delivered? FedEx

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
 4. Shipping container/cooler in good condition? Yes ☒ No ☐
 5. Custody Seals present on shipping container/cooler?
 (Refer to comments for Custody Seals not intact) Yes ☐ No ☒ Not Required ☐
 6. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
 7. Were all items received at a temperature of $>0^{\circ}\text{C}$ to 10.0°C * Yes ☒ No ☐ NA ☐
 8. Sample(s) in proper container(s)? Yes ☒ No ☐
 9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
 10. Are samples properly preserved? Yes ☒ No ☐
 11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
 12. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
 13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
 14. Does paperwork match bottle labels? Yes ☒ No ☐
 15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
 16. Is it clear what analyses were requested? Yes ☒ No ☐
 17. Were all holding times able to be met? Yes ☒ No ☐

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:

Item Information

Item #	Temp °C
Cooler	3.2
Sample	6.0

* Note: DoD/ELAP and TNI require items to be received at $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

2001255

Send Report To Michael ErdahlCompany Friedman and Bruya, Inc.Address 3012 16th Ave WCity, State, ZIP Seattle, WA 98119Phone # (206) 285-8282 Fax # (206) 283-5044

SUBCONTRACTER

Fremont

PROJECT NAME/NO.

001212

PO #

A-531

REMARKS

Please Email Results

Page # 1 of 1

TURNAROUND TIME

☐ Standard (2 Weeks)☒ RUSH 24 hour

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

Page 14 of 14

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED										Notes
						Dioxins/Furans	EPH	VPH	Diazinon	Nitrate	Phosphate					
B-6: Surface		1/16/20	925	Soil	1				x	x	x					
B-6: 2			1030													Hold
B-7: Surface			925						x	x	x					
B-7: 2			930													Hold
B-8: Surface			1005						x	x	x					
B-8: 2			1010													Hold
B-9: Surface			1105						x	x	x					
B-9: 2			1110													Hold

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

SIGNATURE

Relinquished by:

Received by:

Relinquished by:

Received by:

PRINT NAME

Michael Erdahl

Carter Johnson

COMPANY

Friedman & Bruya

FAI

DATE

1/16/20

1/16/20

TIME

15:70

17:25

SAMPLE CHAIN OF CUSTODY

ME 01-16-20

Report To Charles McFadden / Thom Morin
 Company TRC
 Address 1180 NW Maple St.
 City, State, ZIP Issaquah, WA 98027
 Phone 425-395-0066 Email cmcfadden@epi-wa.com

SAMPLERS (signature) Nate Dorfner
Charles McFadden + Joe Sherman
 PROJECT NAME 015397
 (Brookdale)
 REMARKS Rush TAT (24hr)
 Project specific RLs? - Yes / No

Page # 1 of 1 VS3

TURNAROUND TIME 812

☐ Standard turnaround
☒ RUSH 24 hr TAT
 Rush charges authorized by:

SAMPLE DISPOSAL
☐ Archive samples
☐ Other
 Default: Dispose after 30 days

						ANALYSES REQUESTED													
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Nitrates + Phosphates	Ethylene Dibromide (EDB)	As	Diazinon	Notes		
B-6: Surface	01A-F	1/16/20	825 826	Soil	6								X	X	X	X	(X) - pvc m		
B-6: 2	02	↓	830	↓	↓								X	X	X	X	1/20/20		
B-7: Surface	03		925								X	X	X	X	ME				
B-7: 2	04		930										(X)						
B-8: Surface	05		1005								X	X	X	X					
B-8: 2	06		1010																
B-9: Surface	07		1105								X	X	X	X					
B-9: 2	08		↓			1110	↓	↓											

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Nate Dorfner</u>	NATE DORFNER	TRC	1/16/20	1515
Received by: <u>Khôi Hoàng</u>	Khôi Hoàng	FB E	1/16/20	1515
Relinquished by:				
Received by:				
		Samples received at <u>4</u> °C		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

February 4, 2020

Charles McFadden, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 015397 (Brookdale), F&BI 001213

Dear Mr McFadden:

Included is the amended report from the testing of material submitted on January 16, 2020 from the 015397 (Brookdale), F&BI 001213 project. Per your request, the dieldrin results have been reported down to the method detection limit.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Thom Morin
TRC0122R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

January 22, 2020

Charles McFadden, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 015397 (Brookdale), F&BI 001213

Dear Mr McFadden:

Included are the results from the testing of material submitted on January 16, 2020 from the 015397 (Brookdale), F&BI 001213 project. There are 22 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Thom Morin
TRC0122R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on January 16, 2020 by Friedman & Bruya, Inc. from the Environmental Partners 015397 (Brookdale), F&BI 001213 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
001213 -01	B-6:GW
001213 -02	B-7:GW
001213 -03	B-8:GW
001213 -04	B-10:GW

The samples were sent to Fremont Analytical for nitrate, phosphate, and organophosphorus pesticide diazinon analyses. The report is enclosed.

The 6020 dissolved metals were filtered at Friedman and Bruya on January 17, 2020 at 11:22. The data were flagged accordingly.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	B-6:GW f	Client:	Environmental Partners
Date Received:	01/16/20	Project:	015397 (Brookdale), F&BI 001213
Date Extracted:	01/17/20	Lab ID:	001213-01
Date Analyzed:	01/17/20	Data File:	001213-01.110
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	B-7:GW f	Client:	Environmental Partners
Date Received:	01/16/20	Project:	015397 (Brookdale), F&BI 001213
Date Extracted:	01/17/20	Lab ID:	001213-02
Date Analyzed:	01/17/20	Data File:	001213-02.111
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	B-8:GW f	Client:	Environmental Partners
Date Received:	01/16/20	Project:	015397 (Brookdale), F&BI 001213
Date Extracted:	01/17/20	Lab ID:	001213-03
Date Analyzed:	01/17/20	Data File:	001213-03.112
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	B-10:GW f	Client:	Environmental Partners
Date Received:	01/16/20	Project:	015397 (Brookdale), F&BI 001213
Date Extracted:	01/17/20	Lab ID:	001213-04
Date Analyzed:	01/17/20	Data File:	001213-04.113
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	Method Blank f	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015397 (Brookdale), F&BI 001213
Date Extracted:	01/17/20	Lab ID:	I0-034 mb2
Date Analyzed:	01/17/20	Data File:	I0-034 mb2.109
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	B-6:GW	Client:	Environmental Partners
Date Received:	01/16/20	Project:	015397 (Brookdale), F&BI 001213
Date Extracted:	01/17/20	Lab ID:	001213-01
Date Analyzed:	01/17/20	Data File:	001213-01.124
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	6.37
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	B-7:GW	Client:	Environmental Partners
Date Received:	01/16/20	Project:	015397 (Brookdale), F&BI 001213
Date Extracted:	01/17/20	Lab ID:	001213-02
Date Analyzed:	01/17/20	Data File:	001213-02.125
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	B-8:GW	Client:	Environmental Partners
Date Received:	01/16/20	Project:	015397 (Brookdale), F&BI 001213
Date Extracted:	01/17/20	Lab ID:	001213-03
Date Analyzed:	01/17/20	Data File:	001213-03.126
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	9.08
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	B-10:GW	Client:	Environmental Partners
Date Received:	01/16/20	Project:	015397 (Brookdale), F&BI 001213
Date Extracted:	01/17/20	Lab ID:	001213-04
Date Analyzed:	01/17/20	Data File:	001213-04.127
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	39.7
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015397 (Brookdale), F&BI 001213
Date Extracted:	01/17/20	Lab ID:	I0-033 mb2
Date Analyzed:	01/17/20	Data File:	I0-033 mb2.115
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	B-6:GW	Client:	Environmental Partners
Date Received:	01/16/20	Project:	015397 (Brookdale), F&BI 001213
Date Extracted:	01/16/20	Lab ID:	001213-01
Date Analyzed:	01/17/20	Data File:	011716.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	30 ip	50	150
DBC	44 ip	50	150

Compounds:	Concentration ug/L
Dieldrin	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	B-7:GW	Client:	Environmental Partners
Date Received:	01/16/20	Project:	015397 (Brookdale), F&BI 001213
Date Extracted:	01/16/20	Lab ID:	001213-02
Date Analyzed:	01/17/20	Data File:	011717.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	51	50	150
DBC	62	50	150

Compounds:	Concentration ug/L
Dieldrin	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	B-8:GW	Client:	Environmental Partners
Date Received:	01/16/20	Project:	015397 (Brookdale), F&BI 001213
Date Extracted:	01/16/20	Lab ID:	001213-03
Date Analyzed:	01/17/20	Data File:	011718.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	50	50	150
DBC	63	50	150

Compounds:	Concentration ug/L
Dieldrin	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	B-10:GW	Client:	Environmental Partners
Date Received:	01/16/20	Project:	015397 (Brookdale), F&BI 001213
Date Extracted:	01/16/20	Lab ID:	001213-04
Date Analyzed:	01/17/20	Data File:	011719.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	53	50	150
DBC	51	50	150

Compounds:	Concentration ug/L
Dieldrin	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015397 (Brookdale), F&BI 001213
Date Extracted:	01/16/20	Lab ID:	00-156 mb2
Date Analyzed:	01/16/20	Data File:	011618.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	48 vo	50	150
DBC	75	50	150

Compounds:	Concentration ug/L
Dieldrin	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/22/20

Date Received: 01/16/20

Project: 015397 (Brookdale), F&BI 001213

Date Extracted: 01/17/20

Date Analyzed: 01/17/20

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR 1,2-DIBROMOETHANE (EDB) BY EPA METHOD 8011 MODIFIED**

Results Reported as µg/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>EDB</u>
B-6:GW 001213-01	<0.01
B-7:GW 001213-02	<0.01
B-8:GW 001190-03	<0.01
B-10:GW 001213-04	<0.01
Method Blank	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/22/20

Date Received: 01/16/20

Project: 015397 (Brookdale), F&BI 001213

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR DISSOLVED METALS USING EPA METHOD 6020B**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	94	95	80-120	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/22/20

Date Received: 01/16/20

Project: 015397 (Brookdale), F&BI 001213

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 001037-28 x10 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	37.9	108	118	75-125	9

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	95	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/22/20

Date Received: 01/16/20

Project: 015397 (Brookdale), F&BI 001213

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	ug/L (ppb)	0.25	83	78	70-130	6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/22/20

Date Received: 01/16/20

Project: 015397 (Brookdale), F&BI 001213

**QUALITY ASSURANCE RESULTS
FROM THE ANALYSIS OF WATER SAMPLES FOR
1,2-DIBROMOETHANE (EDB) BY EPA METHOD 8011 MODIFIED**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	Percent	Acceptance Criteria	RPD (Limit 10)
			Recovery LCS	Recovery LCSD		
1,2-Dibromoethane	ug/L (ppb)	0.10	98	103	70-130	6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



Fremont
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Friedman & Bruya

Michael Erdahl

3012 16th Ave. W.

Seattle, WA 98119

RE: 001213

Work Order Number: 2001254

January 20, 2020

Attention Michael Erdahl:

Fremont Analytical, Inc. received 4 sample(s) on 1/16/2020 for the analyses presented in the following report.

Ion Chromatography by EPA Method 300.0

Organophosphorus Pesticides by EPA Method 8270-SIM

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

CC:

Eric Young



Date: 01/20/2020

CLIENT: Friedman & Bruya
Project: 001213
Work Order: 2001254

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2001254-001	B-6:GW	01/16/2020 8:55 AM	01/16/2020 5:25 PM
2001254-002	B-7:GW	01/16/2020 9:35 AM	01/16/2020 5:25 PM
2001254-003	B-8:GW	01/16/2020 10:35 AM	01/16/2020 5:25 PM
2001254-004	B-10:GW	01/16/2020 1:25 PM	01/16/2020 5:25 PM

CLIENT: Friedman & Bruya
Project: 001213

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 2001254
Date Reported: 1/20/2020

CLIENT: Friedman & Bruya
Project: 001213

Lab ID: 2001254-001

Client Sample ID: B-6:GW

Collection Date: 1/16/2020 8:55:00 AM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27157

Analyst: SB

Diazinon	ND	0.198		µg/L	1	1/17/2020 5:04:06 PM
Surr: Triphenylphosphate	121	10 - 132		%Rec	1	1/17/2020 5:04:06 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27176

Analyst: SS

Nitrate (as N)	2.05	0.100		mg/L	1	1/17/2020 5:04:00 PM
Ortho-Phosphate (as P)	ND	0.200		mg/L	1	1/17/2020 5:04:00 PM

Lab ID: 2001254-002

Client Sample ID: B-7:GW

Collection Date: 1/16/2020 9:35:00 AM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27157

Analyst: SB

Diazinon	ND	0.199		µg/L	1	1/17/2020 5:26:39 PM
Surr: Triphenylphosphate	124	10 - 132		%Rec	1	1/17/2020 5:26:39 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27176

Analyst: SS

Nitrate (as N)	3.18	0.200	D	mg/L	2	1/17/2020 9:18:00 PM
Ortho-Phosphate (as P)	ND	0.200		mg/L	1	1/17/2020 5:27:00 PM



Analytical Report

Work Order: 2001254
Date Reported: 1/20/2020

CLIENT: Friedman & Bruya
Project: 001213

Lab ID: 2001254-003

Client Sample ID: B-8:GW

Collection Date: 1/16/2020 10:35:00 AM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27157

Analyst: SB

Diazinon	ND	0.197		µg/L	1	1/17/2020 5:49:12 PM
Surr: Triphenylphosphate	93.2	10 - 132		%Rec	1	1/17/2020 5:49:12 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27176

Analyst: SS

Nitrate (as N)	4.07	0.200	DH	mg/L	2	1/20/2020 10:46:00 AM
Nitrate (as N)	4.23	0.100	E	mg/L	1	1/17/2020 6:59:00 PM
Ortho-Phosphate (as P)	ND	0.200		mg/L	1	1/17/2020 6:59:00 PM

NOTES:

E - Estimated value. The amount exceeds the linear working range of the instrument.

Lab ID: 2001254-004

Client Sample ID: B-10:GW

Collection Date: 1/16/2020 1:25:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27157

Analyst: SB

Diazinon	ND	0.198		µg/L	1	1/17/2020 6:11:40 PM
Surr: Triphenylphosphate	92.1	10 - 132		%Rec	1	1/17/2020 6:11:40 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27176

Analyst: SS

Nitrate (as N)	2.64	0.200	DH	mg/L	2	1/20/2020 11:09:00 AM
Nitrate (as N)	2.74	0.100	E	mg/L	1	1/17/2020 7:22:00 PM
Ortho-Phosphate (as P)	ND	0.200		mg/L	1	1/17/2020 7:22:00 PM

NOTES:

E - Estimated value. The amount exceeds the linear working range of the instrument.



Date: 1/20/2020

Work Order: 2001254
CLIENT: Friedman & Bruya
Project: 001213

QC SUMMARY REPORT
Ion Chromatography by EPA Method 300.0

Sample ID: MB-27176	SampType: MBLK	Units: mg/L		Prep Date: 1/17/2020	RunNo: 56744
Client ID: MBLKW	Batch ID: 27176	Analysis Date: 1/17/2020		SeqNo: 1130675	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrate (as N)	ND	0.100
Ortho-Phosphate (as P)	ND	0.200

Sample ID: LCS-27176	SampType: LCS	Units: mg/L		Prep Date: 1/17/2020	RunNo: 56744
Client ID: LCSW	Batch ID: 27176	Analysis Date: 1/17/2020		SeqNo: 1130676	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrate (as N)	0.700	0.100	0.7500	0	93.3	90	110
Ortho-Phosphate (as P)	1.16	0.200	1.250	0	92.5	90	110

Sample ID: 2001254-002BDUP	SampType: DUP	Units: mg/L		Prep Date: 1/17/2020	RunNo: 56744
Client ID: B-7:GW	Batch ID: 27176	Analysis Date: 1/17/2020		SeqNo: 1130679	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrate (as N)	3.34	0.100					3.338	0.0300	20	E
Ortho-Phosphate (as P)	ND	0.200					0		20	

NOTES:

E - Estimated value. The amount exceeds the linear working range of the instrument.

Sample ID: 2001254-002BMS	SampType: MS	Units: mg/L		Prep Date: 1/17/2020	RunNo: 56744
Client ID: B-7:GW	Batch ID: 27176	Analysis Date: 1/17/2020		SeqNo: 1130680	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrate (as N)	4.17	0.100	0.7500	3.338	111	80	120			E
Ortho-Phosphate (as P)	1.15	0.200	1.250	0	92.0	80	120			

NOTES:

E - Estimated value. The amount exceeds the linear working range of the instrument.

Work Order: 2001254
CLIENT: Friedman & Bruya
Project: 001213

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: 2001254-002BMSD		SampType: MSD			Units: mg/L		Prep Date: 1/17/2020			RunNo: 56744		
Client ID: B-7:GW		Batch ID: 27176			Analysis Date: 1/17/2020			SeqNo: 1130681				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Nitrate (as N)	4.18	0.100	0.7500	3.338	113	80	120	4.170	0.311	20	E	
Ortho-Phosphate (as P)	1.21	0.200	1.250	0	96.8	80	120	1.150	5.08	20		

NOTES:

E - Estimated value. The amount exceeds the linear working range of the instrument.

Work Order: 2001254
CLIENT: Friedman & Bruya
Project: 001213

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: MB-27157		SampType: MBLK		Units: µg/L		Prep Date: 1/16/2020			RunNo: 56726			
Client ID: MBLKW		Batch ID: 27157					Analysis Date: 1/17/2020			SeqNo: 1130114		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	0.198									
Surr: Triphenylphosphate	0.540		0.3959		136	10	132				S

NOTES:

S - Outlying surrogate recovery(ies) observed (high bias). Sample is non-detect; no further action required.

Sample ID: LCS-27157		SampType: LCS			Units: µg/L		Prep Date: 1/16/2020			RunNo: 56726		
Client ID: LCSW		Batch ID: 27157						Analysis Date: 1/17/2020			SeqNo: 1130115	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	2.00	0.198	1.975	0	101	26.5	127				
Surr: Triphenylphosphate	0.458		0.3951		116	10	132				

Sample ID: LCSD-27157	SampType: LCSD	Units: µg/L			Prep Date: 1/16/2020				RunNo: 56726		
Client ID: LCSW02	Batch ID: 27157	Analysis Date: 1/17/2020							SeqNo: 1130116		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diazinon	2.13	0.198	1.980	0	108	26.5	127	2.000	6.42	30	
Surr: Triphenylphosphate	0.440		0.3961		111	10	132		0		

Sample ID: 2001241-001BDUP		SampType: DUP			Units: µg/L		Prep Date: 1/16/2020			RunNo: 56726		
Client ID: BATCH		Batch ID: 27157			Analysis Date: 1/17/2020					SeqNo: 1130118		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	0.234						0		30	
Surr: Triphenylphosphate	0.448		0.4686		95.5	10	132		0		

Client Name: **FB**
 Logged by: **Clare Griggs**

Work Order Number: **2001254**
 Date Received: **1/16/2020 5:25:00 PM**

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
 2. How was the sample delivered? FedEx

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
 4. Shipping container/cooler in good condition? Yes ☒ No ☐
 5. Custody Seals present on shipping container/cooler?
 (Refer to comments for Custody Seals not intact) Yes ☐ No ☒ Not Required ☐
 6. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
 7. Were all items received at a temperature of $>0^{\circ}\text{C}$ to 10.0°C * Yes ☒ No ☐ NA ☐
 8. Sample(s) in proper container(s)? Yes ☒ No ☐
 9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
 10. Are samples properly preserved? Yes ☒ No ☐
 11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
 12. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
 13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
 14. Does paperwork match bottle labels? Yes ☒ No ☐
 15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
 16. Is it clear what analyses were requested? Yes ☒ No ☐
 17. Were all holding times able to be met? Yes ☒ No ☐

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:

Item Information

Item #	Temp °C
Cooler	3.2
Sample	6.0

* Note: DoD/ELAP and TNI require items to be received at $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$

2001254

Phone # (206) 285-8282 Fax # (206) 283-5044

Fremont

PO #

001213

A-531

REMARKS

Please Email Results

Page # 1 of 1

TURNAROUND TIME

□ Standard (2 Weeks)

☒ RUSH 24 hour

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions[illegible]

Fax (206) 282-5044

Relinquished by:

Received by:

Relinquished by:

Received by

Michael Erdahl

Carter Johnson

Friedman & Bruya

FAI

5/16/20

1/16/2

15720

1725

SAMPLE CHAIN OF CUSTODY

001213
Report To Charles McLadden / Thom Morin
Company TRC
Address 1180 NW Maple St.
City, State, ZIP Issaquah, WA 98027
Phone 425-395-0060 Email cmcladden@trccompanies.com

SAMPLERS (signature) Nate Dorfner
Charles McLadden + Joe Sherrill
PROJECT NAME 015397 PO # 015397
(Brookdale)
REMARKS Rush TAT (24hr) INVOICE TO FREE
Project specific RLs? - Yes / No Ichito USA

ME 01-16-20
TURNAROUND TIME VWZ
☐ Standard turnaround
☒ RUSH 24 HR TAT ALS
Rush charges authorized by:
SAMPLE DISPOSAL
☐ Archive samples
☐ Other
Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Nitrates + Phosphates	As (total + Dissolved)	Ethylene Dibromide (EDB)	Diazinon + Dieldrin	
B-6: GW	01A-G	1/16/20	855	H ₂ O	8								X	X	X	X	
B-7: GW	02		935										X	X	X	X	
B-8: GW	03		1035										X	X	X	X	
B-10: GW	04		1325										X	X	X	X	

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Nate Dorfner</u>	NATE DORFNER	TRC	1/16/20	1515
Received by: <u>Khôi Hoàng</u>	Khôi Hoàng	FBI	1/16/20	1515
Relinquished by:				
Received by:		Samples received at <u>4</u> °C		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

January 27, 2020

Charles McFadden, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 015397, F&BI 001237

Dear Mr McFadden:

Included are the results from the testing of material submitted on January 17, 2020 from the 015397, F&BI 001237 project. There are 14 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
TRC0127R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on January 17, 2020 by Friedman & Bruya, Inc. from the Environmental Partners 015397, F&BI 001237 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
001237-01	TP-1:Surface
001237-02	TP-1:2
001237-03	TP-2:Surface
001237-04	TP-2:2
001237-05	TP-3:Surface
001237-06	TP-3:2
001237-07	TP-4:Surface
001237-08	TP-4:2

Samples TP-1:Surface, TP-2:Surface, TP-3:Surface, and TP-4:Surface were sent to Fremont Analytical for nitrate, phosphate, and organophosphorus pesticide diazinon analyses. The report is enclosed.

The 8260D internal standard for samples TP-1:Surface, TP-3:Surface, and TP-4:Surface did not pass the acceptance criteria. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	TP-1:Surface	Client:	Environmental Partners
Date Received:	01/17/20	Project:	015397, F&BI 001237
Date Extracted:	01/17/20	Lab ID:	001237-01
Date Analyzed:	01/20/20	Data File:	012019.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	108	50	150
Toluene-d8	87 J	50	150
4-Bromofluorobenzene	120 J	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005 J

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	TP-2:Surface	Client:	Environmental Partners
Date Received:	01/17/20	Project:	015397, F&BI 001237
Date Extracted:	01/17/20	Lab ID:	001237-03
Date Analyzed:	01/20/20	Data File:	012020.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	108	50	150
Toluene-d8	89 J	50	150
4-Bromofluorobenzene	125 J	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	TP-3:Surface	Client:	Environmental Partners
Date Received:	01/17/20	Project:	015397, F&BI 001237
Date Extracted:	01/17/20	Lab ID:	001237-05
Date Analyzed:	01/20/20	Data File:	012021.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99 J	50	150
Toluene-d8	87 J	50	150
4-Bromofluorobenzene	111 J	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005 J

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	TP-4:Surface	Client:	Environmental Partners
Date Received:	01/17/20	Project:	015397, F&BI 001237
Date Extracted:	01/17/20	Lab ID:	001237-07
Date Analyzed:	01/20/20	Data File:	012022.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	109	50	150
Toluene-d8	87 J	50	150
4-Bromofluorobenzene	126 J	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005 J

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Direct Sparge

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015397, F&BI 001237
Date Extracted:	01/17/20	Lab ID:	00-0144 mb
Date Analyzed:	01/17/20	Data File:	011713.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	91 J	50	150
Toluene-d8	99 J	50	150
4-Bromofluorobenzene	92 J	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005 J

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	TP-1:Surface	Client:	Environmental Partners
Date Received:	01/17/20	Project:	015397, F&BI 001237
Date Extracted:	01/17/20	Lab ID:	001237-01
Date Analyzed:	01/17/20	Data File:	001237-01.105
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	3.11
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	TP-2:Surface	Client:	Environmental Partners
Date Received:	01/17/20	Project:	015397, F&BI 001237
Date Extracted:	01/17/20	Lab ID:	001237-03
Date Analyzed:	01/17/20	Data File:	001237-03.106
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	3.42
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	TP-3:Surface	Client:	Environmental Partners
Date Received:	01/17/20	Project:	015397, F&BI 001237
Date Extracted:	01/17/20	Lab ID:	001237-05
Date Analyzed:	01/17/20	Data File:	001237-05.118
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	5.66
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	TP-4:Surface	Client:	Environmental Partners
Date Received:	01/17/20	Project:	015397, F&BI 001237
Date Extracted:	01/17/20	Lab ID:	001237-07
Date Analyzed:	01/17/20	Data File:	001237-07.119
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	3.89
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015397, F&BI 001237
Date Extracted:	01/17/20	Lab ID:	I0-036 mb
Date Analyzed:	01/17/20	Data File:	I0-036 mb.090
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/27/20

Date Received: 01/17/20

Project: 015397, F&BI 001237

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260D DIRECT SPARGE**

Laboratory Code: 001237-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet wt)	Duplicate Result (Wet wt)	RPD (Limit 20)
1,2-Dibromoethane (EDB)	mg/kg (ppm)	<0.005 J	<0.005 J	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
1,2-Dibromoethane (EDB)	mg/kg (ppm)	0.05	113	104	70-130	8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/27/20

Date Received: 01/17/20

Project: 015397, F&BI 001237

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 001202-02 x5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	6.05	79	89	75-125	12

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	84	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



Fremont
Analytical

3600 Fremont Ave. N.

Seattle, WA 98103

T: (206) 352-3790

F: (206) 352-7178

info@fremontanalytical.com

Friedman & Bruya

Michael Erdahl

3012 16th Ave. W.

Seattle, WA 98119

RE: 001237

Work Order Number: 2001273

January 20, 2020

Attention Michael Erdahl:

Fremont Analytical, Inc. received 8 sample(s) on 1/17/2020 for the analyses presented in the following report.

Ion Chromatography by EPA Method 300.0

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample Moisture (Percent Moisture)

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

DoD/ELAP Certification #L17-135, ISO/IEC 17025:2005
ORELAP Certification: WA 100009-007 (NELAP Recognized)

CLIENT: Friedman & Bruya
Project: 001237
Work Order: 2001273

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2001273-001	TP-1:Surface	01/17/2020 9:20 AM	01/17/2020 1:30 PM
2001273-002	TP-1:2	01/17/2020 9:30 AM	01/17/2020 1:30 PM
2001273-003	TP-2:Surface	01/17/2020 9:45 AM	01/17/2020 1:30 PM
2001273-004	TP-2:2	01/17/2020 9:50 AM	01/17/2020 1:30 PM
2001273-005	TP-3:Surface	01/17/2020 10:15 AM	01/17/2020 1:30 PM
2001273-006	TP-3:2	01/17/2020 10:20 AM	01/17/2020 1:30 PM
2001273-007	TP-4:Surface	01/17/2020 11:00 AM	01/17/2020 1:30 PM
2001273-008	TP-4:2	01/17/2020 11:10 AM	01/17/2020 1:30 PM

CLIENT: Friedman & Bruya
Project: 001237

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 2001273

Date Reported: 1/20/2020

Client: Friedman & Bruya

Collection Date: 1/17/2020 9:20:00 AM

Project: 001237

Lab ID: 2001273-001

Matrix: Soil

Client Sample ID: TP-1:Surface

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27162

Analyst: SB

Diazinon	ND	642		µg/Kg-dry	1	1/17/2020 11:26:36 PM
Surr: Triphenylphosphate	102	10.7 - 154		%Rec	1	1/17/2020 11:26:36 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27177

Analyst: SS

Nitrate (as N)	3.97	1.38		mg/Kg-dry	1	1/18/2020 1:32:00 AM
Orthophosphate (as P)	ND	2.75		mg/Kg-dry	1	1/18/2020 1:32:00 AM

Sample Moisture (Percent Moisture)

Batch ID: R56723

Analyst: CJ

Percent Moisture	27.4	0.500		wt%	1	1/17/2020 2:53:20 PM
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Analytical Report

Work Order: 2001273

Date Reported: 1/20/2020

Client: Friedman & Bruya

Collection Date: 1/17/2020 9:45:00 AM

Project: 001237

Lab ID: 2001273-003

Matrix: Soil

Client Sample ID: TP-2:Surface

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27162

Analyst: SB

Diazinon	ND	639		µg/Kg-dry	1	1/17/2020 11:49:07 PM
Surr: Triphenylphosphate	84.3	10.7 - 154		%Rec	1	1/17/2020 11:49:07 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 27177

Analyst: SS

Nitrate (as N)	ND	1.39		mg/Kg-dry	1	1/18/2020 1:55:00 AM
Orthophosphate (as P)	ND	2.78		mg/Kg-dry	1	1/18/2020 1:55:00 AM

Sample Moisture (Percent Moisture)

Batch ID: R56723

Analyst: CJ

Percent Moisture	28.4	0.500		wt%	1	1/17/2020 2:53:20 PM
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Client: Friedman & Bruya

Collection Date: 1/17/2020 10:15:00 AM

Project: 001237

Lab ID: 2001273-005

Matrix: Soil

Client Sample ID: TP-3:Surface

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27162

Analyst: SB

Diazinon	ND	831		µg/Kg-dry	1	1/18/2020 12:11:36 AM
Surr: Triphenylphosphate	82.8	10.7 - 154		%Rec	1	1/18/2020 12:11:36 AM

Ion Chromatography by EPA Method 300.0

Batch ID: 27177

Analyst: SS

Nitrate (as N)	2.48	1.74		mg/Kg-dry	1	1/18/2020 2:18:00 AM
Orthophosphate (as P)	ND	3.47		mg/Kg-dry	1	1/18/2020 2:18:00 AM

Sample Moisture (Percent Moisture)

Batch ID: R56723

Analyst: CJ

Percent Moisture	42.4	0.500		wt%	1	1/17/2020 2:53:20 PM
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Analytical Report

Work Order: 2001273

Date Reported: 1/20/2020

Client: Friedman & Bruya

Collection Date: 1/17/2020 11:00:00 AM

Project: 001237

Lab ID: 2001273-007

Matrix: Soil

Client Sample ID: TP-4:Surface

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 27162

Analyst: SB

Diazinon	ND	647		µg/Kg-dry	1	1/18/2020 12:34:07 AM
Surr: Triphenylphosphate	61.9	10.7 - 154		%Rec	1	1/18/2020 12:34:07 AM

Ion Chromatography by EPA Method 300.0

Batch ID: 27177

Analyst: SS

Nitrate (as N)	2.43	1.52		mg/Kg-dry	1	1/18/2020 2:41:00 AM
Orthophosphate (as P)	ND	3.04		mg/Kg-dry	1	1/18/2020 2:41:00 AM

Sample Moisture (Percent Moisture)

Batch ID: R56723

Analyst: CJ

Percent Moisture	34.3	0.500		wt%	1	1/17/2020 2:53:20 PM
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Work Order: 2001273
CLIENT: Friedman & Bruya
Project: 001237

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: MB-27177		SampType: MBLK		Units: mg/Kg		Prep Date: 1/17/2020			RunNo: 56738			
Client ID: MBLKS		Batch ID: 27177					Analysis Date: 1/17/2020			SeqNo: 1130449		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	ND	1.00									
Orthophosphate (as P)	ND	2.00									

Sample ID: LCS-27177		SampType: LCS			Units: mg/Kg		Prep Date: 1/17/2020			RunNo: 56738		
Client ID: LCSS		Batch ID: 27177						Analysis Date: 1/17/2020			SeqNo: 1130450	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	7.71	1.00	7.500	0	103	90	110				
Orthophosphate (as P)	12.6	2.00	12.50	0	101	90	110				

Sample ID: 2001273-007ADUP		SampType: DUP			Units: mg/Kg-dry		Prep Date: 1/17/2020			RunNo: 56738		
Client ID: TP-4:Surface		Batch ID: 27177			Analysis Date: 1/18/2020			SeqNo: 1130461				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	2.01	1.51						2.429	18.6	30	
Orthophosphate (as P)	ND	3.03						0		30	

Sample ID: 2001273-007AMS		SampType: MS			Units: mg/Kg-dry		Prep Date: 1/17/2020			RunNo: 56738		
Client ID: TP-4:Surface		Batch ID: 27177			Analysis Date: 1/18/2020			SeqNo: 1130462				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	13.1	1.51	11.35	2.429	93.9	80	120				
Orthophosphate (as P)	ND	3.03	18.92	0	0	80	120				S

NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.



Date: 1/20/2020

Work Order: 2001273
CLIENT: Friedman & Bruya
Project: 001237

QC SUMMARY REPORT
Ion Chromatography by EPA Method 300.0

Sample ID: 2001273-007AMSD		SampType: MSD			Units: mg/Kg-dry		Prep Date: 1/17/2020		RunNo: 56738		
Client ID: TP-4:Surface		Batch ID: 27177			Analysis Date: 1/18/2020				SeqNo: 1130463		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Nitrate (as N)	13.4	1.53	11.44	2.429	95.7	80	120	13.09	2.15	30	
Orthophosphate (as P)	ND	3.05	19.06	0	14.7	80	120	0		30	S

NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Work Order: 2001273
CLIENT: Friedman & Bruya
Project: 001237

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: MB-27162		SampType: MBLK		Units: µg/Kg		Prep Date: 1/17/2020			RunNo: 56737			
Client ID: MBLKS		Batch ID: 27162					Analysis Date: 1/17/2020			SeqNo: 1130426		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	500									
Surr: Triphenylphosphate	21.3		20.00		107	10.7	154				

Sample ID: LCS-27162		SampType: LCS			Units: µg/Kg		Prep Date: 1/17/2020			RunNo: 56737		
Client ID: LCSS		Batch ID: 27162			Analysis Date: 1/17/2020			SeqNo: 1130427				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	10.3	500	20.00	0	51.4	37.1	132				
Surr: Triphenylphosphate	21.0		20.00		105	10.7	154				

Sample ID: 2001255-001AMS		SampType: MS			Units: µg/Kg-dry		Prep Date: 1/17/2020			RunNo: 56737		
Client ID: BATCH		Batch ID: 27162			Analysis Date: 1/17/2020					SeqNo: 1130429		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	15.4	513	20.53	0	75.0	9.74	142				
Surr: Triphenylphosphate	21.8		20.53		106	10.7	154				

Sample ID: 2001255-001AMSD		SampType: MSD			Units: µg/Kg-dry		Prep Date: 1/17/2020			RunNo: 56737		
Client ID: BATCH		Batch ID: 27162			Analysis Date: 1/17/2020					SeqNo: 1130430		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	16.4	493	19.70	0	83.2	9.74	142	0		30	
Surr: Triphenylphosphate	19.4		19.70		98.6	10.7	154		0		

Sample ID: 2001255-001ADUP		SampType: DUP			Units: µg/Kg-dry		Prep Date: 1/17/2020		RunNo: 56737		
Client ID: BATCH		Batch ID: 27162			Analysis Date: 1/17/2020				SeqNo: 1130431		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diazinon	ND	469						0		30	
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Work Order: 2001273
CLIENT: Friedman & Bruya
Project: 001237

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: 2001255-001ADUP		SampType: DUP			Units: µg/Kg-dry		Prep Date: 1/17/2020		RunNo: 56737		
Client ID: BATCH		Batch ID: 27162			Analysis Date: 1/17/2020				SeqNo: 1130431		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Triphenylphosphate	16.4		18.76		87.7	10.7	154		0		

Sample Log-In Check List

Client Name: **FB**
 Logged by: **Carissa True**

Work Order Number: **2001273**
 Date Received: **1/17/2020 1:30:00 PM**

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
 2. How was the sample delivered? FedEx

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
 4. Shipping container/cooler in good condition? Yes ☒ No ☐
 5. Custody Seals present on shipping container/cooler?
 (Refer to comments for Custody Seals not intact) Yes ☐ No ☒ Not Required ☐
 6. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
 7. Were all items received at a temperature of $>0^{\circ}\text{C}$ to 10.0°C * Yes ☒ No ☐ NA ☐
 8. Sample(s) in proper container(s)? Yes ☒ No ☐
 9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
 10. Are samples properly preserved? Yes ☒ No ☐
 11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
 12. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
 13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
 14. Does paperwork match bottle labels? Yes ☒ No ☐
 15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
 16. Is it clear what analyses were requested? Yes ☒ No ☐
 17. Were all holding times able to be met? Yes ☒ No ☐

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: Date:
 By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
 Regarding:
 Client Instructions:

19. Additional remarks:

Item Information

Item #	Temp °C
Cooler 1	4.2
Sample 1	5.9

* Note: DoD/ELAP and TNI require items to be received at $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

2001273 *cont 1/17*
 2001272

Send Report To Michael Erdahl
 Company Friedman and Bruya, Inc.
 Address 3012 16th Ave W
 City, State, ZIP Seattle, WA 98119
 Phone # (206) 285-8282 Fax # (206) 283-5044

SUBCONTRACTOR	
PROJECT NAME/NO. 001237	PO # A-530
REMARKS Please Email Results	

Page # _____ of _____

TURNAROUND TIME
☐ Standard (2 Weeks)
☒ RUSH 24 hr
 Rush charges authorized by:
[Signature]

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED										Notes
						Dioxins/Furans	EPH	VPH	Dig Zinon	Nitrate	Phosphate					
TP-1: Surface		1/17/20	920	Soil	1				X	X	X					
TP-1:2			930		1											
TP-2: Surface			945		1				X	X	X					
TP-2:2			950		1											
TP-3: Surface			1015		1				X	X	X					
TP-3:2 TP-3:2			1020		1											
TP-4: Surface			1100		1				X	X	X					
TP-4:2 TP-4:2			1110		1											

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>[Signature]</i>	Michael Erdahl	Friedman & Bruya	12/17/20	1305
Received by: <i>[Signature]</i>	Liz Webber-Brye	FAT	1/17/20	1330
Relinquished by:	Markenzie Minkert			
Received by:				

001237

SAMPLE CHAIN OF CUSTODY

ME 01/17/20 VS3/B03

Report To Charles McFadden / Thon MorinCompany TRCAddress 1180 NW Maple St Ste 310City, State, ZIP Issaquah, WA 98022Phone 425-345-0010 Email C. McFadden@TRCcompanies.com
T. Morin@TRCcompanies.comSAMPLERS (signature) Page # 1 of 1

PROJECT NAME

015397

PO #

REMARKS

INVOICE TO

Ichiro USA

Project specific RLs? - Yes / No

TURNAROUND TIME

☐ Standard turnaround☒ RUSH 24 hr

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Archive samples☐ Other

Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Nitrates / Phosphates	As	ethylene Disinfectant (EDB)	Diazinon	
TP-1: Surface	01 A-F	1/17/20	920	Soil	6								X	X	X	X	
TP-1: 2	02		930														
TP-2: Surface	03		945										X	X	X	X	
TP-2: 2	04		950														
TP-3: Surface	05		1015										X	X	X	X	
TP-3: 2	06		1020														
TP-4: Surface	07		1100										X	X	X	X	
TP-4: 2	08		1110														

Friedman & Bruya, Inc.

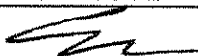
3012 16th Avenue West

Seattle, WA 98119-2029

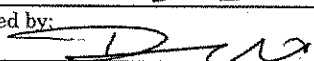
Ph. (206) 285-8282

SIGNATURE

Relinquished by:



Received by:



Relinquished by:

Received by:

PRINT NAME

Eric Krueger

DO NOT

COMPANY

TRC

F&BI

DATE

1/17/20

1-17-20

TIME

1252

1252

Samples received at 1°C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

January 28, 2020

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 015397, F&BI 001355

Dear Mr Morin:

Included are the results from the testing of material submitted on January 24, 2020 from the 015397, F&BI 001355 project. There are 11 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Charles McFadden
TRC0128R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on January 24, 2020 by Friedman & Bruya, Inc. from the Environmental Partners 015397, F&BI 001355 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
001355 -01	AOI-12:Surface
001355 -02	AOI-12:2
001355 -03	AOI-13:Surface
001355 -04	AOI-13:2
001355 -05	AOI-14:Surface
001355 -06	AOI-14:2
001355 -07	AOI-16:Surface
001355 -08	AOI-16:1.5
001355 -09	AOI-21:Surface
001355 -10	AOI-21:2
001355 -11	AOI-23:Surface
001355 -12	AOI-23:2
001355 -13	AOI-20-5:s
001355 -14	AOI-20-5:2

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	AOI-12:Surface	Client:	Environmental Partners
Date Received:	01/24/20	Project:	015397, F&BI 001355
Date Extracted:	01/27/20	Lab ID:	001355-01
Date Analyzed:	01/27/20	Data File:	001355-01.032
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	3.91
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	AOI-13:Surface	Client:	Environmental Partners
Date Received:	01/24/20	Project:	015397, F&BI 001355
Date Extracted:	01/27/20	Lab ID:	001355-03
Date Analyzed:	01/27/20	Data File:	001355-03.033
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	3.92
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	AOI-14:Surface	Client:	Environmental Partners
Date Received:	01/24/20	Project:	015397, F&BI 001355
Date Extracted:	01/27/20	Lab ID:	001355-05
Date Analyzed:	01/27/20	Data File:	001355-05.034
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	3.63
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	AOI-16:Surface	Client:	Environmental Partners
Date Received:	01/24/20	Project:	015397, F&BI 001355
Date Extracted:	01/27/20	Lab ID:	001355-07
Date Analyzed:	01/27/20	Data File:	001355-07.037
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	4.38
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	AOI-21:Surface	Client:	Environmental Partners
Date Received:	01/24/20	Project:	015397, F&BI 001355
Date Extracted:	01/27/20	Lab ID:	001355-09
Date Analyzed:	01/27/20	Data File:	001355-09.038
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	9.77
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	AOI-23:Surface	Client:	Environmental Partners
Date Received:	01/24/20	Project:	015397, F&BI 001355
Date Extracted:	01/27/20	Lab ID:	001355-11
Date Analyzed:	01/27/20	Data File:	001355-11.039
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	2.54
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	AOI-20-5:s	Client:	Environmental Partners
Date Received:	01/24/20	Project:	015397, F&BI 001355
Date Extracted:	01/27/20	Lab ID:	001355-13
Date Analyzed:	01/27/20	Data File:	001355-13.042
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	10.4
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015397, F&BI 001355
Date Extracted:	01/27/20	Lab ID:	I0-054 mb
Date Analyzed:	01/27/20	Data File:	I0-054 mb.030
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/28/20

Date Received: 01/24/20

Project: 015397, F&BI 001355

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 001355-11 x5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	<5	95	108	75-125	13

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	110	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

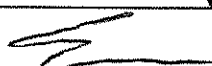
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

001355

SAMPLE CHAIN OF CUSTODY 01-24-20

BE41 2
Page # ofReport To Thom Morin & Charles McFaddenCompany TRCAddress 1180 NW Maple StCity, State, ZIP Issaquah, WA 98027Phone _____ Email TMorin@trccompanies.comSAMPLERS (signature) 

PROJECT NAME

015397

PO #

015397

REMARKS

INVOICE TO

Project specific RLs? - Yes / No

TURNAROUND TIME

☐ Standard turnaround☒ RUSH 24 hr

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Archive samples☐ Other _____

Default: Dispose after 30 days

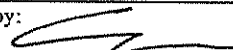
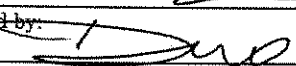
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	A5			
AOI-12: Surface	01	1/24/20	0900	SOIL	1								X			
AOI-12: 2	02		0905													
AOI-13: Surface	03		0930										X			
AOI-13: 2	04		0935													
AOI-14: Surface	05		0950										X			
AOI-14: 2	06		0955													
AOI-16: Surface	07		1005										X			
AOI-16: 1.5	08		1010													Samples received at 4 °C
AOI-21: Surface	09		1035										X			
AOI-21: 2	10		1040													

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

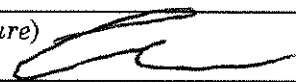
Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Eric Krueger	TRC	1/24/20	1421
Received by: 	DO VO	F&B	1-24-20	14:21
Relinquished by: _____				
Received by: _____				

001355

SAMPLE CHAIN OF CUSTODY

01-24-20

Bty 2 of 2
Page # 2 of 2Report To Tom Morin & Charles McFaddenCompany TRCAddress 1180 NW Maple StCity, State, ZIP Issaquah, WA 98027Phone _____ Email Tom@trccompanies.comSAMPLERS (signature) 

PROJECT NAME

015397

PO #

015397

REMARKS

INVOICE TO

Project specific RLs? - Yes / No

TURNAROUND TIME

☐ Standard turnaround
☒ RUSH 24 hr
Rush charges authorized by: _____

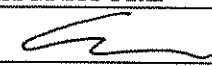
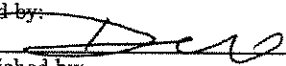
SAMPLE DISPOSAL

☐ Archive samples
☐ Other _____
Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	As			
AOI-23: Surface	11	1/24/20	1100	Soil	1								X			
AOI-23: 2	12	1/24/20	1105	Soil	1											
AOI-20-5: S	13	1/24/20	1220	Soil	1								X			
AOI-20-5: 2	14	1/24/20	1225	Soil	1											

Samples received at 4 °C

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Eric Krueger	TRC	1/24/20	1421
Received by: 	Do Vo	FBI	1-24-20	14.21
Relinquished by: _____	_____	_____	_____	_____
Received by: _____	_____	_____	_____	_____

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

February 19, 2020

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 015397, F&BI 002224

Dear Mr Morin:

Included are the results from the testing of material submitted on February 17, 2020 from the 015397, F&BI 002224 project. There are 5 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Charles McFadden
TRC0219R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on February 17, 2020 by Friedman & Bruya, Inc. from the Environmental Partners 015397, F&BI 002224 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
002224 -01	MW-1

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	MW-1	Client:	Environmental Partners
Date Received:	02/17/20	Project:	015397, F&BI 002224
Date Extracted:	02/17/20	Lab ID:	002224-01
Date Analyzed:	02/17/20	Data File:	021720.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	59	50	150
DBC	59	50	150

Compounds:	Concentration ug/L
Dieldrin	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	015397, F&BI 002224
Date Extracted:	02/17/20	Lab ID:	00-436 mb
Date Analyzed:	02/17/20	Data File:	021718.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	116	50	150

Compounds:	Concentration ug/L
Dieldrin	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/19/20

Date Received: 02/17/20

Project: 015397, F&BI 002224

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	ug/L (ppb)	0.25	91	90	70-130	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.


x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

002224

SAMPLE CHAIN OF CUSTODY

ME 02/17/20

DOY

Report To Thom Morin & Charles McFaddenCompany TRCAddress 1180 NW Maple StCity, State, ZIP Issaquah, WA 98027Phone _____ Email TMorin@trccompaines.comSAMPLERS (signature) Page # 1 of 1

PROJECT NAME

PO #

015397 TRC

Ichijo USA CO., LTD

REMARKS

INVOICE TO

74001 EPI

Project specific RLs? - Yes / No

TURNAROUND TIME

Standard turnaround

X RUSH 24 hr

Rush charges authorized by: _____

SAMPLE DISPOSAL

Archive samples

Other _____

Default: Dispose after 30 days

						ANALYSES REQUESTED															
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	dielrin								Notes
MW-1	01	2/17/20	1025	GW	1								X								

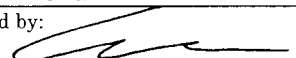
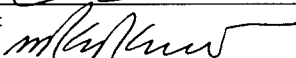
Samples received at 4 °C

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Eric Krueger	TRC	2/17/20	1236
Received by: 	Nhan Phan	FBI	2/17/20	1236
Relinquished by:				
Received by:				

Attachment D
2021 TRC Laboratory Analytical Results

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

March 15, 2021

Nate Hinsperger, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 430733-Ichijo USA, F&BI 103078

Dear Mr Hinsperger:

Included are the results from the testing of material submitted on March 3, 2021 from the 430733-Ichijo USA, F&BI 103078 project. There are 29 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
TRC0315R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on March 3, 2020 by Friedman & Bruya, Inc. from the TRC Environmental 430733-Ichijo USA, F&BI 103078 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>TRC Environmental</u>
103078 -01	DPT-1:Surface
103078 -02	DPT-1:2
103078 -03	DPT-1:GW
103078 -04	DPT-2:Surface
103078 -05	DPT-2:2
103078 -06	DPT-2:GW
103078 -07	DPT-3:Surface
103078 -08	DPT-3:2
103078 -09	DPT-3:GW

The samples marked for analysis were sent to Fremont Analytical for nitrate, phosphate, and diazinon analyses. The report is enclosed.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-1:Surface	Client:	TRC Environmental
Date Received:	03/03/21	Project:	430733-Ichijo USA, F&BI 103078
Date Extracted:	03/04/21	Lab ID:	103078-01
Date Analyzed:	03/04/21	Data File:	103078-01.058
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	2.85
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-2:Surface	Client:	TRC Environmental
Date Received:	03/03/21	Project:	430733-Ichijo USA, F&BI 103078
Date Extracted:	03/04/21	Lab ID:	103078-04
Date Analyzed:	03/04/21	Data File:	103078-04.059
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	2.94
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-3:Surface	Client:	TRC Environmental
Date Received:	03/03/21	Project:	430733-Ichijo USA, F&BI 103078
Date Extracted:	03/04/21	Lab ID:	103078-07
Date Analyzed:	03/04/21	Data File:	103078-07.060
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	1.97
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	430733-Ichijo USA, F&BI 103078
Date Extracted:	03/04/21	Lab ID:	I1-145 mb2
Date Analyzed:	03/04/21	Data File:	I1-145 mb2.056
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	DPT-1:GW	Client:	TRC Environmental
Date Received:	03/03/21	Project:	430733-Ichijo USA, F&BI 103078
Date Extracted:	03/04/21	Lab ID:	103078-03
Date Analyzed:	03/04/21	Data File:	103078-03.115
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	DPT-2:GW	Client:	TRC Environmental
Date Received:	03/03/21	Project:	430733-Ichijo USA, F&BI 103078
Date Extracted:	03/04/21	Lab ID:	103078-06
Date Analyzed:	03/04/21	Data File:	103078-06.116
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	DPT-3:GW	Client:	TRC Environmental
Date Received:	03/03/21	Project:	430733-Ichijo USA, F&BI 103078
Date Extracted:	03/04/21	Lab ID:	103078-09
Date Analyzed:	03/04/21	Data File:	103078-09.117
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	430733-Ichijo USA, F&BI 103078
Date Extracted:	03/04/21	Lab ID:	I1-148 mb
Date Analyzed:	03/04/21	Data File:	I1-148 mb.064
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-1:GW	Client:	TRC Environmental
Date Received:	03/03/21	Project:	430733-Ichijo USA, F&BI 103078
Date Extracted:	03/04/21	Lab ID:	103078-03
Date Analyzed:	03/04/21	Data File:	103078-03.125
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	2.06
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-2:GW	Client:	TRC Environmental
Date Received:	03/03/21	Project:	430733-Ichijo USA, F&BI 103078
Date Extracted:	03/04/21	Lab ID:	103078-06
Date Analyzed:	03/04/21	Data File:	103078-06.122
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-3:GW	Client:	TRC Environmental
Date Received:	03/03/21	Project:	430733-Ichijo USA, F&BI 103078
Date Extracted:	03/04/21	Lab ID:	103078-09
Date Analyzed:	03/04/21	Data File:	103078-09.123
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	2.03
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	430733-Ichijo USA, F&BI 103078
Date Extracted:	03/04/21	Lab ID:	I1-148 mb
Date Analyzed:	03/04/21	Data File:	I1-148 mb.064
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	DPT-1:Surface	Client:	TRC Environmental
Date Received:	03/03/21	Project:	430733-Ichijo USA, F&BI 103078
Date Extracted:	03/05/21	Lab ID:	103078-01
Date Analyzed:	03/05/21	Data File:	030515.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	79	128
Toluene-d8	100	84	121
4-Bromofluorobenzene	106	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	DPT-2:Surface	Client:	TRC Environmental
Date Received:	03/03/21	Project:	430733-Ichijo USA, F&BI 103078
Date Extracted:	03/05/21	Lab ID:	103078-04
Date Analyzed:	03/05/21	Data File:	030516.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	84	79	128
Toluene-d8	92	84	121
4-Bromofluorobenzene	102	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	DPT-3:Surface	Client:	TRC Environmental
Date Received:	03/03/21	Project:	430733-Ichijo USA, F&BI 103078
Date Extracted:	03/05/21	Lab ID:	103078-07
Date Analyzed:	03/05/21	Data File:	030517.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	79	128
Toluene-d8	101	84	121
4-Bromofluorobenzene	108	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	430733-Ichijo USA, F&BI 103078
Date Extracted:	03/05/21	Lab ID:	01-463 mb
Date Analyzed:	03/05/21	Data File:	030506.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	79	128
Toluene-d8	102	84	121
4-Bromofluorobenzene	98	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/15/21

Date Received: 03/03/21

Project: 430733-Ichijo USA, F&BI 103078

Date Extracted: 03/08/21

Date Analyzed: 03/08/21

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR 1,2-DIBROMOETHANE (EDB) BY EPA METHOD 8011 MODIFIED**

Results Reported as µg/L (ppb)

Sample ID

EDB

Laboratory ID

DPT-1:GW

<0.01

103078-03

DPT-2:GW

<0.01

103078-06

DPT-3:GW

<0.01

103078-09

Method Blank

<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DPT-1:GW	Client:	TRC Environmental
Date Received:	03/03/21	Project:	430733-Ichijo USA, F&BI 103078
Date Extracted:	03/05/21	Lab ID:	103078-03
Date Analyzed:	03/05/21	Data File:	030529.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	20	121
DBC	85	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DPT-2:GW	Client:	TRC Environmental
Date Received:	03/03/21	Project:	430733-Ichijo USA, F&BI 103078
Date Extracted:	03/05/21	Lab ID:	103078-06
Date Analyzed:	03/05/21	Data File:	030530.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	20	121
DBC	78	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DPT-3:GW	Client:	TRC Environmental
Date Received:	03/03/21	Project:	430733-Ichijo USA, F&BI 103078
Date Extracted:	03/05/21	Lab ID:	103078-09
Date Analyzed:	03/05/21	Data File:	030531.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	45	20	121
DBC	78	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	430733-Ichijo USA, F&BI 103078
Date Extracted:	03/05/21	Lab ID:	01-537 mb
Date Analyzed:	03/05/21	Data File:	030527.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	20	121
DBC	92	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/15/21

Date Received: 03/03/21

Project: 430733-Ichijo USA, F&BI 103078

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 103038-01 x5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	9.50	94	104	75-125	10

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	105	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/15/21

Date Received: 03/03/21

Project: 430733-Ichijo USA, F&BI 103078

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR DISSOLVED METALS USING EPA METHOD 6020B**

Laboratory Code: 103078-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	2.06	101	104	75-125	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	97	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/15/21

Date Received: 03/03/21

Project: 430733-Ichijo USA, F&BI 103078

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 103078-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	2.06	101	104	75-125	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	97	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/15/21

Date Received: 03/03/21

Project: 430733-Ichijo USA, F&BI 103078

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260D**

Laboratory Code: 103098-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
1,2-Dibromoethane (EDB)	mg/kg (ppm)	1.0	<0.005	68	73	50-150	7

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
1,2-Dibromoethane (EDB)	mg/kg (ppm)	1.0	119	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/15/21

Date Received: 03/03/21

Project: 430733-Ichijo USA, F&BI 103078

**QUALITY ASSURANCE RESULTS
FROM THE ANALYSIS OF WATER SAMPLES FOR
1,2-DIBROMOETHANE (EDB) BY EPA METHOD 8011 MODIFIED**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	Percent	Acceptance Criteria	RPD (Limit 10)
			Recovery LCS	Recovery LCSD		
1,2-Dibromoethane	ug/L (ppb)	0.10	111	113	70-130	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/15/21

Date Received: 03/03/21

Project: 430733-Ichijo USA, F&BI 103078

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	ug/L (ppb)	0.25	85	81	52-112	5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

103078

SAMPLE CHAIN OF CUSTODY

03-03-21 E04/ALY/002/VS2

Report To Nate HinspergerCompany TRCAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email NHinsperger@trc

SAMPLERS (signature)

Rebecca Odell

PROJECT NAME

PO #

430733- Ichijo USA

REMARKS

Direct-billed to Ichijo

INVOICE TO

Project specific RLs? - Yes / No

Page # 1 of 1

TURNAROUND TIME

☒ Standard turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Archive samples☐ Other

Default: Dispose after 30 days

company.com						ANALYSES REQUESTED											
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	Arsenic (6020) XWTHHDX	1,2-Dibromochloroethane NWTHH Gx (8260) NWTHH Gx (8260)	Dioxin (8270) Dioxin (8270) Dioxin (8270)	Dioxin (8270) Dioxin (8270) Dioxin (8270)	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Nitrate (300.0)	Phosphate (300.0)	As, Total	As, Dissolved	Hold 2 ft depth per NW 3/3/21 ME Notes Boil for EDB in water per ME/NH 3/3/21
DPT-1: Surface	01 A-F	3/3/21	1055	Soil	6	X	X	X					X	X			As Dissolved
DPT-1: 2	02		1110	Soil	6	X	X	X					X	X			is Field Filtered - Hold
DPT-1: GW	03 A-W		1145	H2O	8		X	X	X				X	X	X	X	
DPT-2: Surface	04 A-F		1250	Soil	6	X	X	X					X	X			
DPT-2: 2	05		1300	Soil	6	X	X	X					X	X			-Hold
DPT-2: GW	06 A-W		1340	H2O	8		X	X	X				X	X	X	X	
DPT-3: Surface	07 A-F		1420	Soil	6	X	X	X					X	X			
DPT-3: 2	08		1435	Soil	6	X	X	X					X	X			-Hold
DPT-3: GW	09 A-W	✓	1500	H2O	8		X	X	X				X	X	X	X	

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Received by:

Relinquished by:

Received by:

David VerretVINCETRCFB13-3-213-3-2116:3016:30Samples received at 4 °C

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282



Fremont
Analytical

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Friedman & Bruya

Michael Erdahl
3012 16th Ave. W.
Seattle, WA 98119

RE: 103078

Work Order Number: 2103068

March 12, 2021

Attention Michael Erdahl:

Fremont Analytical, Inc. received 9 sample(s) on 3/4/2021 for the analyses presented in the following report.

Ion Chromatography by EPA Method 300.0

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample Moisture (Percent Moisture)

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

*DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.3 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910*

Original

www.fremontanalytical.com

CLIENT: Friedman & Bruya
Project: 103078
Work Order: 2103068

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2103068-001	DPT-1:Surface	03/03/2021 10:55 AM	03/04/2021 12:00 PM
2103068-002	DPT-1:2	03/03/2021 11:10 AM	03/04/2021 12:00 PM
2103068-003	DPT-1:GW	03/03/2021 11:45 AM	03/04/2021 12:00 PM
2103068-004	DPT-2:Surface	03/03/2021 12:50 PM	03/04/2021 12:00 PM
2103068-005	DPT-2:2	03/03/2021 1:00 PM	03/04/2021 12:00 PM
2103068-006	DPT-2:GW	03/03/2021 1:40 PM	03/04/2021 12:00 PM
2103068-007	DPT-3:Surface	03/03/2021 2:20 PM	03/04/2021 12:00 PM
2103068-008	DPT-3:2	03/03/2021 2:35 PM	03/04/2021 12:00 PM
2103068-009	DPT-3:GW	03/03/2021 3:00 PM	03/04/2021 12:00 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

CLIENT: Friedman & Bruya
Project: 103078

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Notations:

-The Initial Calibration Verification (ICV) associated with the water samples run by EPA 300.0 recovered just outside of the acceptable range for nitrate. The calibration verification samples surrounding the samples enclosed in this report recovered within acceptable bounds. The outlying ICV is included in this report for estimation of potential bias.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- DUP - Sample Duplicate
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MCL - Maximum Contaminant Level
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- REP - Sample Replicate
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 2103068
Date Reported: 3/12/2021

CLIENT: Friedman & Bruya
Project: 103078

Lab ID: 2103068-001

Client Sample ID: DPT-1:Surface

Collection Date: 3/3/2021 10:55:00 AM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31584

Analyst: SB

Diazinon	ND	510		µg/Kg-dry	1	3/9/2021 1:07:59 PM
Surr: Triphenylphosphate	84.8	10.4 - 150		%Rec	1	3/9/2021 1:07:59 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 31630

Analyst: SS

Nitrate (as N)	ND	1.55		mg/Kg-dry	1	3/11/2021 8:16:00 PM
Orthophosphate (as P)	ND	5.67		mg/Kg-dry	1	3/11/2021 8:16:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R65687

Analyst: RL

Percent Moisture	3.14	0.500		wt%	1	3/8/2021 10:00:34 AM
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Lab ID: 2103068-003

Client Sample ID: DPT-1:GW

Collection Date: 3/3/2021 11:45:00 AM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31577

Analyst: SB

Diazinon	ND	0.199		µg/L	1	3/10/2021 5:49:42 PM
Surr: Triphenylphosphate	100	15.9 - 163		%Rec	1	3/10/2021 5:49:42 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 31559

Analyst: SS

Nitrate (as N)	3.64	1.00	DQ	mg/L	10	3/4/2021 10:21:00 PM
Ortho-Phosphate (as P)	ND	5.25	D	mg/L	10	3/4/2021 10:21:00 PM

NOTES:

Diluted due to high levels of non-target analytes.

Q - Indicates an analyte with an initial calibration verification that does not meet established acceptance criteria for Nitrogen, Nitrate.



Work Order: 2103068
Date Reported: 3/12/2021

CLIENT: Friedman & Bruya
Project: 103078

Lab ID: 2103068-004

Client Sample ID: DPT-2:Surface

Collection Date: 3/3/2021 12:50:00 PM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31584

Analyst: SB

Diazinon	ND	514		µg/Kg-dry	1	3/9/2021 1:30:26 PM
Surr: Triphenylphosphate	82.2	10.4 - 150		%Rec	1	3/9/2021 1:30:26 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 31630

Analyst: SS

Nitrate (as N)	ND	1.57		mg/Kg-dry	1	3/11/2021 9:48:00 PM
Orthophosphate (as P)	ND	5.76		mg/Kg-dry	1	3/11/2021 9:48:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R65687

Analyst: RL

Percent Moisture	4.56	0.500		wt%	1	3/8/2021 10:00:34 AM
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Lab ID: 2103068-006

Client Sample ID: DPT-2:GW

Collection Date: 3/3/2021 1:40:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31577

Analyst: SB

Diazinon	ND	0.199		µg/L	1	3/10/2021 6:34:22 PM
Surr: Triphenylphosphate	100	15.9 - 163		%Rec	1	3/10/2021 6:34:22 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 31559

Analyst: SS

Nitrate (as N)	4.46	1.00	DQ	mg/L	10	3/4/2021 10:45:00 PM
Ortho-Phosphate (as P)	ND	5.25	D	mg/L	10	3/4/2021 10:45:00 PM

NOTES:

Diluted due to high levels of non-target analytes.

Q - Indicates an analyte with an initial calibration verification that does not meet established acceptance criteria for Nitrogen, Nitrate.



Analytical Report

Work Order: 2103068
Date Reported: 3/12/2021

CLIENT: Friedman & Bruya
Project: 103078

Lab ID: 2103068-007

Client Sample ID: DPT-3:Surface

Collection Date: 3/3/2021 2:20:00 PM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31584

Analyst: SB

Diazinon	ND	508		µg/Kg-dry	1	3/9/2021 1:52:55 PM
Surr: Triphenylphosphate	83.5	10.4 - 150		%Rec	1	3/9/2021 1:52:55 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 31630

Analyst: SS

Nitrate (as N)	ND	1.57		mg/Kg-dry	1	3/11/2021 10:11:00 PM
Orthophosphate (as P)	ND	5.74		mg/Kg-dry	1	3/11/2021 10:11:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R65687

Analyst: RL

Percent Moisture	4.30	0.500		wt%	1	3/8/2021 10:00:34 AM
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Lab ID: 2103068-009

Client Sample ID: DPT-3:GW

Collection Date: 3/3/2021 3:00:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31577

Analyst: SB

Diazinon	ND	0.199		µg/L	1	3/10/2021 6:56:45 PM
Surr: Triphenylphosphate	106	15.9 - 163		%Rec	1	3/10/2021 6:56:45 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 31559

Analyst: SS

Nitrate (as N)	7.65	1.00	DQ	mg/L	10	3/4/2021 11:08:00 PM
Ortho-Phosphate (as P)	ND	5.25	D	mg/L	10	3/4/2021 11:08:00 PM

NOTES:

Diluted due to high levels of non-target analytes.

Q - Indicates an analyte with an initial calibration verification that does not meet established acceptance criteria for Nitrogen, Nitrate.

Work Order: 2103068
CLIENT: Friedman & Bruya
Project: 103078

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: ICV-31539		SampType: ICV			Units: mg/L		Prep Date: 3/2/2021			RunNo: 65755		
Client ID: ICV		Batch ID: 31559			Analysis Date: 3/2/2021			SeqNo: 1322831				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Nitrate (as N)	0.665	0.100	0.7500	0	88.7	90	110				S	
Ortho-Phosphate (as P)	1.29	0.525	1.250	0	103	90	110					

NOTES:

S - Outlying spike recovery observed (low bias). Samples will be qualified with a Q.

Sample ID: MB-31559	SampType: MBLK	Units: mg/L			Prep Date: 3/4/2021				RunNo: 65823		
Client ID: MBLKW	Batch ID: 31559	Analysis Date: 3/4/2021							SeqNo: 1324309		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	ND	0.100									Q
Ortho-Phosphate (as P)	ND	0.525									

NOTES:

Q - Indicates an analyte with an initial calibration verification that does not meet established acceptance criteria for Nitrogen, Nitrate.

Sample ID: LCS-31559	SampType: LCS	Units: mg/L			Prep Date: 3/4/2021			RunNo: 65823			
Client ID: LCSW	Batch ID: 31559	Analysis Date: 3/4/2021						SeqNo: 1324310			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.715	0.100	0.7500	0	95.3	90	110				
Ortho-Phosphate (as P)	1.39	0.525	1.250	0	111	90	110				S

NOTES:

S - Outlying spike recovery observed (high bias). Samples are non-detect for this analyte; no further action required.

Sample ID: 2103065-008CDUP		SampType: DUP		Units: mg/L		Prep Date: 3/4/2021			RunNo: 65823		
Client ID: BATCH		Batch ID: 31559					Analysis Date: 3/4/2021			SeqNo: 1324321	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	ND	1.00						0		20	DQ
Ortho-Phosphate (as P)	ND	5.25						0		20	D

NOTES:

Diluted due to high levels of non-target analytes.

Q - Indicates an analyte with an initial calibration verification that does not meet established acceptance criteria for Nitrogen, Nitrate.

Work Order: 2103068
CLIENT: Friedman & Bruya
Project: 103078

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: 2103065-008CMS		SampType: MS			Units: mg/L		Prep Date: 3/4/2021			RunNo: 65823		
Client ID: BATCH		Batch ID: 31559			Analysis Date: 3/4/2021					SeqNo: 1324322		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	7.07	1.00	7.500	0	94.3	80	120				D
Ortho-Phosphate (as P)	11.7	5.25	12.50	0	93.5	80	120				D

Sample ID: 2103065-008CMSD		SampType: MSD			Units: mg/L		Prep Date: 3/4/2021			RunNo: 65823		
Client ID: BATCH		Batch ID: 31559			Analysis Date: 3/4/2021					SeqNo: 1324323		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	7.09	1.00	7.500	0	94.5	80	120	7.070	0.282	20	D
Ortho-Phosphate (as P)	16.2	5.25	12.50	0	130	80	120	11.69	32.5	20	DS

NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range for Phosphorus, Total Orthophosphate (As PO4)

Sample ID: 2103061-001EDUP		SampType: DUP			Units: mg/L		Prep Date: 3/4/2021			RunNo: 65823		
Client ID: BATCH		Batch ID: 31559			Analysis Date: 3/4/2021					SeqNo: 1324333		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	1.00	0.500						1.025	2.47	20	DQ
Ortho-Phosphate (as P)	ND	2.62						0		20	D

NOTES:

Diluted due to high levels of non-target analytes.

Q - Indicates an analyte with an initial calibration verification that does not meet established acceptance criteria for Nitrogen, Nitrate.

Work Order: 2103068
CLIENT: Friedman & Bruya
Project: 103078

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: MB-31630		SampType: MBLK		Units: mg/Kg		Prep Date: 3/11/2021			RunNo: 65837			
Client ID: MBLKS		Batch ID: 31630					Analysis Date: 3/11/2021			SeqNo: 1324621		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	ND	1.50									
Orthophosphate (as P)	ND	5.50									

Sample ID: LCS-31630		SampType: LCS			Units: mg/Kg		Prep Date: 3/11/2021			RunNo: 65837		
Client ID: LCSS		Batch ID: 31630			Analysis Date: 3/11/2021			SeqNo: 1324622				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	7.06	1.50	7.500	0	94.1	90	110				
Orthophosphate (as P)	15.8	5.50	12.50	0	127	90	110				S

NOTES:

S - Outlying spike recovery observed (high bias). Samples are non-detect for this analyte; no further action required.

Sample ID: 2103068-001ADUP		SampType: DUP			Units: mg/Kg-dry		Prep Date: 3/11/2021			RunNo: 65837		
Client ID: DPT-1:Surface		Batch ID: 31630			Analysis Date: 3/11/2021					SeqNo: 1324624		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	ND	1.55						0		30	
Orthophosphate (as P)	ND	5.67						0		30	

Sample ID: 2103068-001AMS		SampType: MS		Units: mg/Kg-dry		Prep Date: 3/11/2021			RunNo: 65837			
Client ID: DPT-1:Surface		Batch ID: 31630					Analysis Date: 3/11/2021			SeqNo: 1324625		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	7.24	1.55	7.739	0	93.6	80	120				
Orthophosphate (as P)	7.73	5.68	12.90	0	59.9	80	120				S

NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Work Order: 2103068
CLIENT: Friedman & Bruya
Project: 103078

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: 2103068-001AMSD		SampType: MSD			Units: mg/Kg-dry		Prep Date: 3/11/2021			RunNo: 65837		
Client ID: DPT-1:Surface		Batch ID: 31630			Analysis Date: 3/11/2021			SeqNo: 1324626				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	7.30	1.55	7.735	0	94.4	80	120	7.244	0.789	30	
Orthophosphate (as P)	7.43	5.67	12.89	0	57.6	80	120	7.729	4.01	30	S

NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Sample ID: 2103086-009ADUP		SampType: DUP			Units: mg/Kg-dry		Prep Date: 3/11/2021			RunNo: 65837		
Client ID: BATCH		Batch ID: 31630			Analysis Date: 3/12/2021			SeqNo: 1324637				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	ND	1.73						0		30	
Orthophosphate (as P)	ND	6.33						0		30	

Sample ID: 2103086-009AMS		SampType: MS		Units: mg/Kg-dry		Prep Date: 3/11/2021			RunNo: 65837			
Client ID: BATCH		Batch ID: 31630					Analysis Date: 3/12/2021			SeqNo: 1324638		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	8.00	1.72	8.616	0	92.8	80	120				
Orthophosphate (as P)	ND	6.32	14.36	0	0	80	120				S

NOTES:

S - Outlying spike recovery(ies) observed.

Work Order: 2103068
CLIENT: Friedman & Bruya
Project: 103078

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: MB-31584		SampType: MBLK			Units: µg/Kg		Prep Date: 3/8/2021			RunNo: 65748		
Client ID: MBLKS		Batch ID: 31584			Analysis Date: 3/9/2021			SeqNo: 1322723				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	500									
Surr: Triphenylphosphate	950		1,000		95.0	10.4	150				

Sample ID: LCS-31584		SampType: LCS			Units: µg/Kg		Prep Date: 3/8/2021			RunNo: 65748		
Client ID: LCSS		Batch ID: 31584			Analysis Date: 3/9/2021					SeqNo: 1322725		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	181	500	200.0	0	90.5	29.6	138				
Surr: Triphenylphosphate	903		1,000		90.3	10.4	150				

Sample ID: 2103086-003AMS		SampType: MS			Units: µg/Kg-dry		Prep Date: 3/8/2021			RunNo: 65748		
Client ID: BATCH		Batch ID: 31584			Analysis Date: 3/9/2021					SeqNo: 1322730		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	177	652	260.7	0	67.8	11.5	132				
Surr: Triphenylphosphate	916		1,303		70.3	10.4	150				

Sample ID: 2103086-003AMSD		SampType: MSD			Units: µg/Kg-dry		Prep Date: 3/8/2021			RunNo: 65748		
Client ID: BATCH		Batch ID: 31584			Analysis Date: 3/9/2021					SeqNo: 1322732		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	181	661	264.3	0	68.3	11.5	132	0		30	
Surr: Triphenylphosphate	890		1,321		67.3	10.4	150		0		

Work Order: 2103068

CLIENT: Friedman & Bruya

Project: 103078

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: MB-31577		SampType: MBLK		Units: µg/L		Prep Date: 3/8/2021			RunNo: 65807			
Client ID: MBLKW		Batch ID: 31577					Analysis Date: 3/10/2021			SeqNo: 1323909		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	0.198									
Surr: Triphenylphosphate	1.91		1.978		96.8	15.9	163				

Sample ID: LCS-31577		SampType: LCS			Units: µg/L		Prep Date: 3/8/2021			RunNo: 65807		
Client ID: LCSW		Batch ID: 31577			Analysis Date: 3/10/2021					SeqNo: 1323910		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	1.97	0.199	1.993	0	99.1	45.3	136				
Surr: Triphenylphosphate	1.83		1.993		91.9	15.9	163				

Sample ID: LCSD-31577		SampType: LCSD			Units: µg/L		Prep Date: 3/8/2021			RunNo: 65807		
Client ID: LCSW02		Batch ID: 31577			Analysis Date: 3/10/2021					SeqNo: 1323911		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	2.01	0.198	1.981	0	101	45.3	136	1.975	1.59	30	
Surr: Triphenylphosphate	2.13		1.981		108	15.9	163		0		

Sample ID: 2103068-003BMS		SampType: MS			Units: µg/L		Prep Date: 3/8/2021			RunNo: 65807		
Client ID: DPT-1:GW		Batch ID: 31577			Analysis Date: 3/10/2021			SeqNo: 1323913				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	2.09	0.216	2.162	0	96.8	70	130				
Surr: Triphenylphosphate	1.99		2.162		92.2	15.9	163				

Client Name: **FB**
 Logged by: **Clare Griggs**

Work Order Number: **2103068**
 Date Received: **3/4/2021 12:00:00 PM**

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
 2. How was the sample delivered? Courier

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
 4. Shipping container/cooler in good condition? Yes ☒ No ☐
 5. Custody Seals present on shipping container/cooler?
 (Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Present ☒
 6. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
 7. Were all items received at a temperature of >2°C to 6°C * Yes ☒ No ☐ NA ☐
 8. Sample(s) in proper container(s)? Yes ☒ No ☐
 9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
 10. Are samples properly preserved? Yes ☒ No ☐
 11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
 12. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
 13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
 14. Does paperwork match bottle labels? Yes ☒ No ☐
 15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
 16. Is it clear what analyses were requested? Yes ☒ No ☐
 17. Were all holding times able to be met? Yes ☒ No ☐

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:

Item Information

Item #	Temp °C
Sample	0.9

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

2103068

Send Report To Michael ErdahlCompany Friedman and Bruya, Inc.Address 3012 16th Ave WCity, State, ZIP Seattle, WA 98119Phone # (206) 285-8282 merdahl@friedmanandbruya.comSUBCONTRACTER Fremont

PROJECT NAME/NO.

103078

PO #

B-164

REMARKS

Please Email Results

Page # 1 of 1

TURNAROUND TIME

☒ Standard TAT☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

Page 15 of 15

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED										Notes
						Dioxins/Furans	EPH	VPH	Diazonia	Nitrate	Phosphate					
DPT-1: Surface		3/3/21	1055	Soil					X	X	X					
DPT-1: 2			1110	soil												- Hold
DPT-1: 6W			1145	H ₂ O					X	X	X					
DPT-2: Surface			1250	soil					X	X	X					
DPT-2: 2			1300	soil												- Hold
DPT-2: 6W			1340	H ₂ O					X	X	X					
DPT-3: Surface			1420	soil					X	X	X					
DPT-3: 2			1435	soil												- Hold
DPT-3: 6W			1500	H ₂ O					X	X	X					

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE

Relinquished by:

Received by:

Relinquished by:

Received by:

PRINT NAME

Michael Erdahl

Carfor Johnson

COMPANY

Friedman & Bruya

FAI

DATE

5/4/21

3/4/21

TIME

0730

1200

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

March 15, 2021

Nate Hinsperger, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 430733-Ichijo, F&BI 103098

Dear Mr Hinsperger:

Included are the results from the testing of material submitted on March 5, 2021 from the 430733-Ichijo, F&BI 103098 project. There are 48 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
TRC0315R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on March 5, 2020 by Friedman & Bruya, Inc. from the TRC Environmental 430733-Ichijo, F&BI 103098 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>TRC Environmental</u>
103098 -01	DPT-4:Surface
103098 -02	DPT-4:2
103098 -03	SS-1:Surface
103098 -04	DPT-5:Surface
103098 -05	DPT-5:2
103098 -06	SS-2:Surface
103098 -07	DPT-6:Surface
103098 -08	DPT-6:2
103098 -09	DPT-7:Surface
103098 -10	DPT-7:2
103098 -11	DPT-8:Surface
103098 -12	DPT-8:2
103098 -13	DPT-9:Surface
103098 -14	DPT-9:2
103098 -15	DPT-4:GW
103098 -16	DPT-5:GW
103098 -17	DPT-6:GW
103098 -18	DPT-7:GW
103098 -19	DPT-8:GW
103098 -20	DPT-9:GW

The samples marked for analysis were sent to Fremont Analytical for nitrate, phosphate, and diazinon analyses. The report is enclosed.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-4:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/08/21	Lab ID:	103098-01
Date Analyzed:	03/10/21	Data File:	103098-01.072
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	4.57
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	SS-1:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/08/21	Lab ID:	103098-03
Date Analyzed:	03/10/21	Data File:	103098-03.073
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	8.10
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-5:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/08/21	Lab ID:	103098-04
Date Analyzed:	03/10/21	Data File:	103098-04.074
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	2.64
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	SS-2:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/08/21	Lab ID:	103098-06
Date Analyzed:	03/10/21	Data File:	103098-06.075
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	4.01
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-6:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/08/21	Lab ID:	103098-07
Date Analyzed:	03/10/21	Data File:	103098-07.076
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	3.23
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-7:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/08/21	Lab ID:	103098-09
Date Analyzed:	03/10/21	Data File:	103098-09.077
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	2.88
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-8:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/08/21	Lab ID:	103098-11
Date Analyzed:	03/10/21	Data File:	103098-11.078
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	3.56
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-9:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/08/21	Lab ID:	103098-13
Date Analyzed:	03/10/21	Data File:	103098-13.081
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	1.61
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/08/21	Lab ID:	I1-154 mb
Date Analyzed:	03/09/21	Data File:	I1-154 mb.031
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	DPT-4:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/08/21	Lab ID:	103098-15
Date Analyzed:	03/09/21	Data File:	103098-15.129
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	AP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	DPT-5:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/08/21	Lab ID:	103098-16
Date Analyzed:	03/09/21	Data File:	103098-16.130
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	AP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	DPT-6:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/08/21	Lab ID:	103098-17
Date Analyzed:	03/09/21	Data File:	103098-17.131
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	AP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	DPT-7:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/08/21	Lab ID:	103098-18
Date Analyzed:	03/09/21	Data File:	103098-18.134
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	AP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	DPT-8:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/08/21	Lab ID:	103098-19
Date Analyzed:	03/09/21	Data File:	103098-19.135
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	AP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	DPT-9:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/08/21	Lab ID:	103098-20
Date Analyzed:	03/09/21	Data File:	103098-20.136
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	AP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/08/21	Lab ID:	I1-156 mb
Date Analyzed:	03/09/21	Data File:	I1-156 mb.033
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	AP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-4:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	103098-15
Date Analyzed:	03/05/21	Data File:	103098-15.106
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	1.64
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-5:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	103098-16
Date Analyzed:	03/05/21	Data File:	103098-16.107
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-6:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	103098-17
Date Analyzed:	03/05/21	Data File:	103098-17.108
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	1.24
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-7:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	103098-18
Date Analyzed:	03/05/21	Data File:	103098-18.109
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	1.80
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-8:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	103098-19
Date Analyzed:	03/05/21	Data File:	103098-19.110
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	2.03
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-9:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	103098-20
Date Analyzed:	03/05/21	Data File:	103098-20.111
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	I1-148 mb2
Date Analyzed:	03/05/21	Data File:	I1-148 mb2.033
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	DPT-4:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	103098-01
Date Analyzed:	03/05/21	Data File:	030507.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	92	79	128
Toluene-d8	94	84	121
4-Bromofluorobenzene	101	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	SS-1:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	103098-03
Date Analyzed:	03/05/21	Data File:	030508.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	79	128
Toluene-d8	101	84	121
4-Bromofluorobenzene	101	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	DPT-5:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	103098-04
Date Analyzed:	03/05/21	Data File:	030509.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	79	128
Toluene-d8	101	84	121
4-Bromofluorobenzene	103	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	SS-2:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	103098-06
Date Analyzed:	03/05/21	Data File:	030510.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	79	128
Toluene-d8	103	84	121
4-Bromofluorobenzene	103	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	DPT-6:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	103098-07
Date Analyzed:	03/05/21	Data File:	030511.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	79	128
Toluene-d8	101	84	121
4-Bromofluorobenzene	101	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	DPT-7:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	103098-09
Date Analyzed:	03/05/21	Data File:	030512.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	79	128
Toluene-d8	101	84	121
4-Bromofluorobenzene	100	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	DPT-8:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	103098-11
Date Analyzed:	03/05/21	Data File:	030513.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	94	79	128
Toluene-d8	100	84	121
4-Bromofluorobenzene	105	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	DPT-9:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	103098-13
Date Analyzed:	03/05/21	Data File:	030514.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	93	79	128
Toluene-d8	101	84	121
4-Bromofluorobenzene	106	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	01-463 mb
Date Analyzed:	03/05/21	Data File:	030506.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	79	128
Toluene-d8	102	84	121
4-Bromofluorobenzene	98	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DPT-4:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	103098-15
Date Analyzed:	03/05/21	Data File:	030534.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	20	121
DBC	96	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DPT-5:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	103098-16
Date Analyzed:	03/05/21	Data File:	030535.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	20	121
DBC	75	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DPT-6:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	103098-17
Date Analyzed:	03/05/21	Data File:	030536.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	50	20	121
DBC	82	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DPT-7:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	103098-18
Date Analyzed:	03/05/21	Data File:	030537.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	48	20	121
DBC	92	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DPT-8:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	103098-19
Date Analyzed:	03/05/21	Data File:	030538.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	59	20	121
DBC	97	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DPT-9:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	103098-20
Date Analyzed:	03/05/21	Data File:	030539.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	57	20	121
DBC	79	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	430733-Ichijo, F&BI 103098
Date Extracted:	03/05/21	Lab ID:	01-537 mb
Date Analyzed:	03/05/21	Data File:	030527.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	20	121
DBC	92	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/15/21
Date Received: 03/05/21
Project: 430733-Ichijo, F&BI 103098
Date Extracted: 03/08/21
Date Analyzed: 03/08/21

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR 1,2-DIBROMOETHANE (EDB) BY EPA METHOD 8011 MODIFIED**
Results Reported as µg/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>EDB</u>
DPT-4:GW 103098-15	<0.01
DPT-5:GW 103098-16	<0.01
DPT-6:GW 103098-17	<0.01
DPT-7:GW 103098-18	<0.01
DPT-8:GW 103098-19	<0.01
DPT-9:GW 103098-20	<0.01
Method Blank	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/15/21

Date Received: 03/05/21

Project: 430733-Ichijo, F&BI 103098

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR DISSOLVED METALS USING EPA METHOD 6020B**

Laboratory Code: 103126-17 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	<1	102	103	75-125	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	105	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/15/21

Date Received: 03/05/21

Project: 430733-Ichijo, F&BI 103098

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 103098-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	3.60	97	94	75-125	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	97	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/15/21

Date Received: 03/05/21

Project: 430733-Ichijo, F&BI 103098

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 103078-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	2.06	101	104	75-125	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	97	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/15/21

Date Received: 03/05/21

Project: 430733-Ichijo, F&BI 103098

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260D**

Laboratory Code: 103098-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
1,2-Dibromoethane (EDB)	mg/kg (ppm)	1.0	<0.005	68	73	50-150	7

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
1,2-Dibromoethane (EDB)	mg/kg (ppm)	1.0	119	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/15/21

Date Received: 03/05/21

Project: 430733-Ichijo, F&BI 103098

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	ug/L (ppb)	0.25	85	81	52-112	5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/15/21

Date Received: 03/05/21

Project: 430733-Ichijo, F&BI 103098

**QUALITY ASSURANCE RESULTS
FROM THE ANALYSIS OF WATER SAMPLES FOR
1,2-DIBROMOETHANE (EDB) BY EPA METHOD 8011 MODIFIED**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	Percent	Acceptance Criteria	RPD (Limit 10)
			Recovery LCS	Recovery LCSD		
1,2-Dibromoethane	ug/L (ppb)	0.10	111	113	70-130	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

ME 03/05/21 VS2/VW2/E03/BT4
 04 Page # 1 of 3

Report To 103098 Nate Hinsperger
 Company TRC
 Address 1180 NW Maple St, Ste 310
 City, State, ZIP Issaquah, WA 98027
 Phone 425-295-0000 Email NHinsperger@trc

SAMPLERS (signature)

Rebecca Odell

PROJECT NAME

430733 - Ichijo

PO #

REMARKS

Direct-bill to Ichijo

INVOICE TO

Project specific RLs? - Yes / No

TURNAROUND TIME

☒ Standard turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Archive samples

☐ Other

Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											8011 for EDB in vials per ME/NA Notes 3/3/21
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	Phosphate (300.0) PCBs EPA 8060	As, 6020	1,2-Dibromo-ethane (8260)	Diazinon (827051N)	Nitrate (300.0)	
DPT-4: Surface	01A-E	3/4/21	0845	Soil	6							X	X	X	X	X	Archive the unchecked samples
DPT-4: 2	02		0850														
SS-1: Surface	03		0939									X	X	X	X	X	
DPT-5: Surface	04		1000									X	X	X	X	X	
DPT-5: 2	05		1010														
SS-2: Surface	06		1033									X	X	X	X	X	
DPT-6: Surface	07		1105									X	X	X	X	X	
DPT-6: 2	08		1115														
DPT-7: Surface	09		1215									X	X	X	X	X	
DPT-7: 2	10		1225														

AP

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>David Verret</u>	<u>TRC</u>	<u>3-4-21</u>	<u>1650</u>
Received by: <u>[Signature]</u>	<u>VINTH</u>	<u>FBI</u>	<u>3/4/21</u>	<u>1650</u>
Relinquished by:				
Received by:				

Samples received at 600

SAMPLE CHAIN OF CUSTODY

ME 03/04/21 VS2(VW2/E03/BI4)

Report To 103098 Nate Hinsberger
 Company TRC
 Address 1180 NW Maple St, Ste 310
 City, State, ZIP Issaquah, WA 98027
 Phone 425-395-0012 Email NHinsberger@trccompanies.com

SAMPLERS (signature) <u>Rebecca Odell</u>	
PROJECT NAME <u>430733 - Ichijo</u>	PO #
REMARKS <u>Direct-bill to Ichijo</u>	INVOICE TO
Project specific RLs? - Yes / No	

Page # 2 of 3

TURNAROUND TIME

☐ Standard turnaround
☐ RUSH
 Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Archive samples
☐ Other _____
 Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes	
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	Phosphate (300) PCBs EPA 8000	Arsenic (6020)	1,2-Dibromoe- thane (8260)	Diazinon (8270.51M)		Nitrate (300)
DPT-8: Surface	11 A-F	3/4/21	1325	Soil	6							X	X	X	X	X	Archive the unchecked samples
DPT-8: 2	13	↓	1335	↓	↓												
DPT-9: Surface	13	↓	1420	↓	↓							X	X	X	X	X	
DPT-9: 2	14	↓	1425	↓	↓												

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>David Vernet</u>	<u>TRC</u>	<u>3-4-21</u>	<u>1650</u>
Received by: <u>[Signature]</u>	<u>VIN 6</u>	<u>FBI</u>	<u>3/4/21</u>	<u>1650</u>
Relinquished by:				
Received by:		Samples received at <u>6°C</u>		



Fremont
Analytical

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Friedman & Bruya

Michael Erdahl
3012 16th Ave. W.
Seattle, WA 98119

RE: 103098

Work Order Number: 2103086

March 12, 2021

Attention Michael Erdahl:

Fremont Analytical, Inc. received 20 sample(s) on 3/5/2021 for the analyses presented in the following report.

Ion Chromatography by EPA Method 300.0

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample Moisture (Percent Moisture)

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

*DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.3 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910*

Original

www.fremontanalytical.com

CLIENT: Friedman & Bruya
Project: 103098
Work Order: 2103086

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2103086-001	DPT-4:Surface	03/04/2021 8:45 AM	03/05/2021 9:01 AM
2103086-002	DPT-4:2	03/04/2021 8:50 AM	03/05/2021 9:01 AM
2103086-003	SS-1:Surface	03/04/2021 9:39 AM	03/05/2021 9:01 AM
2103086-004	DPT-5:Surface	03/04/2021 10:00 AM	03/05/2021 9:01 AM
2103086-005	DPT-5:2	03/04/2021 10:10 AM	03/05/2021 9:01 AM
2103086-006	SS-2:Surface	03/04/2021 10:33 AM	03/05/2021 9:01 AM
2103086-007	DPT-6:Surface	03/04/2021 11:05 AM	03/05/2021 9:01 AM
2103086-008	DPT-6:2	03/04/2021 11:15 AM	03/05/2021 9:01 AM
2103086-009	DPT-7:Surface	03/04/2021 12:15 PM	03/05/2021 9:01 AM
2103086-010	DPT-7:2	03/04/2021 12:25 PM	03/05/2021 9:01 AM
2103086-011	DPT-8:Surface	03/04/2021 1:25 PM	03/05/2021 9:01 AM
2103086-012	DPT-8:2	03/04/2021 1:35 PM	03/05/2021 9:01 AM
2103086-013	DPT-9:Surface	03/04/2021 2:20 PM	03/05/2021 9:01 AM
2103086-014	DPT-9:2	03/04/2021 2:25 PM	03/05/2021 9:01 AM
2103086-015	DPT-4:GW	03/04/2021 9:30 AM	03/05/2021 9:01 AM
2103086-016	DPT-5:GW	03/04/2021 10:30 AM	03/05/2021 9:01 AM
2103086-017	DPT-6:GW	03/04/2021 11:45 AM	03/05/2021 9:01 AM
2103086-018	DPT-7:GW	03/04/2021 12:40 PM	03/05/2021 9:01 AM
2103086-019	DPT-8:GW	03/04/2021 1:50 PM	03/05/2021 9:01 AM
2103086-020	DPT-9:GW	03/04/2021 2:45 PM	03/05/2021 9:01 AM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

CLIENT: Friedman & Bruya
Project: 103098

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- DUP - Sample Duplicate
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MCL - Maximum Contaminant Level
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- REP - Sample Replicate
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 2103086
Date Reported: 3/12/2021

CLIENT: Friedman & Bruya
Project: 103098

Lab ID: 2103086-001

Client Sample ID: DPT-4:Surface

Collection Date: 3/4/2021 8:45:00 AM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31584

Analyst: SB

Diazinon	ND	469		µg/Kg-dry	1	3/9/2021 2:15:25 PM
Surr: Triphenylphosphate	82.4	10.4 - 150		%Rec	1	3/9/2021 2:15:25 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 31630

Analyst: SS

Nitrate (as N)	2.55	1.64		mg/Kg-dry	1	3/11/2021 10:34:00 PM
Orthophosphate (as P)	ND	6.00		mg/Kg-dry	1	3/11/2021 10:34:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R65687

Analyst: RL

Percent Moisture	8.32	0.500		wt%	1	3/8/2021 10:00:34 AM
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Lab ID: 2103086-003

Client Sample ID: SS-1:Surface

Collection Date: 3/4/2021 9:39:00 AM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31584

Analyst: SB

Diazinon	ND	624		µg/Kg-dry	1	3/9/2021 12:00:37 PM
Surr: Triphenylphosphate	72.9	10.4 - 150		%Rec	1	3/9/2021 12:00:37 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 31630

Analyst: SS

Nitrate (as N)	5.03	2.02		mg/Kg-dry	1	3/11/2021 11:44:00 PM
Orthophosphate (as P)	ND	7.40		mg/Kg-dry	1	3/11/2021 11:44:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R65716

Analyst: mch

Percent Moisture	25.7	0.500		wt%	1	3/9/2021 9:38:42 AM
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Analytical Report

Work Order: 2103086
Date Reported: 3/12/2021

CLIENT: Friedman & Bruya
Project: 103098

Lab ID: 2103086-004

Client Sample ID: DPT-5:Surface

Collection Date: 3/4/2021 10:00:00 AM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31584

Analyst: SB

Diazinon	ND	510		µg/Kg-dry	1	3/9/2021 2:37:56 PM
Surr: Triphenylphosphate	84.3	10.4 - 150		%Rec	1	3/9/2021 2:37:56 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 31630

Analyst: SS

Nitrate (as N)	ND	1.73		mg/Kg-dry	1	3/12/2021 12:07:00 AM
Orthophosphate (as P)	ND	6.34		mg/Kg-dry	1	3/12/2021 12:07:00 AM

Sample Moisture (Percent Moisture)

Batch ID: R65716

Analyst: mch

Percent Moisture	13.2	0.500		wt%	1	3/9/2021 9:38:42 AM
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Lab ID: 2103086-006

Client Sample ID: SS-2:Surface

Collection Date: 3/4/2021 10:33:00 AM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31584

Analyst: SB

Diazinon	ND	569		µg/Kg-dry	1	3/9/2021 3:00:26 PM
Surr: Triphenylphosphate	64.2	10.4 - 150		%Rec	1	3/9/2021 3:00:26 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 31630

Analyst: SS

Nitrate (as N)	ND	1.84		mg/Kg-dry	1	3/12/2021 12:30:00 AM
Orthophosphate (as P)	ND	6.76		mg/Kg-dry	1	3/12/2021 12:30:00 AM

Sample Moisture (Percent Moisture)

Batch ID: R65716

Analyst: mch

Percent Moisture	18.6	0.500		wt%	1	3/9/2021 9:38:42 AM
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Analytical Report

Work Order: 2103086
Date Reported: 3/12/2021

CLIENT: Friedman & Bruya
Project: 103098

Lab ID: 2103086-007

Client Sample ID: DPT-6:Surface

Collection Date: 3/4/2021 11:05:00 AM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31584 Analyst: SB

Diazinon	ND	479		µg/Kg-dry	1	3/9/2021 3:23:04 PM
Surr: Triphenylphosphate	77.9	10.4 - 150		%Rec	1	3/9/2021 3:23:04 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 31630 Analyst: SS

Nitrate (as N)	ND	1.60		mg/Kg-dry	1	3/12/2021 12:53:00 AM
Orthophosphate (as P)	ND	5.86		mg/Kg-dry	1	3/12/2021 12:53:00 AM

Sample Moisture (Percent Moisture)

Batch ID: R65716 Analyst: mch

Percent Moisture	6.20	0.500		wt%	1	3/9/2021 9:38:42 AM
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Lab ID: 2103086-009

Client Sample ID: DPT-7:Surface

Collection Date: 3/4/2021 12:15:00 PM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31584 Analyst: SB

Diazinon	ND	527		µg/Kg-dry	1	3/9/2021 3:45:34 PM
Surr: Triphenylphosphate	82.8	10.4 - 150		%Rec	1	3/9/2021 3:45:34 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 31630 Analyst: SS

Nitrate (as N)	ND	1.73		mg/Kg-dry	1	3/12/2021 1:16:00 AM
Orthophosphate (as P)	ND	6.33		mg/Kg-dry	1	3/12/2021 1:16:00 AM

Sample Moisture (Percent Moisture)

Batch ID: R65716 Analyst: mch

Percent Moisture	13.0	0.500		wt%	1	3/9/2021 9:38:42 AM
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Work Order: 2103086
Date Reported: 3/12/2021

CLIENT: Friedman & Bruya
Project: 103098

Lab ID: 2103086-011

Client Sample ID: DPT-8:Surface

Collection Date: 3/4/2021 1:25:00 PM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31584

Analyst: SB

Diazinon	ND	625		µg/Kg-dry	1	3/9/2021 4:08:03 PM
Surr: Triphenylphosphate	66.6	10.4 - 150		%Rec	1	3/9/2021 4:08:03 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 31630

Analyst: SS

Nitrate (as N)	2.08	1.96		mg/Kg-dry	1	3/12/2021 2:26:00 AM
Orthophosphate (as P)	ND	7.18		mg/Kg-dry	1	3/12/2021 2:26:00 AM

Sample Moisture (Percent Moisture)

Batch ID: R65716

Analyst: mch

Percent Moisture	23.3	0.500		wt%	1	3/9/2021 9:38:42 AM
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Lab ID: 2103086-013

Client Sample ID: DPT-9:Surface

Collection Date: 3/4/2021 2:20:00 PM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31584

Analyst: SB

Diazinon	ND	472		µg/Kg-dry	1	3/9/2021 4:30:38 PM
Surr: Triphenylphosphate	88.5	10.4 - 150		%Rec	1	3/9/2021 4:30:38 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 31630

Analyst: SS

Nitrate (as N)	ND	1.58		mg/Kg-dry	1	3/12/2021 2:49:00 AM
Orthophosphate (as P)	ND	5.81		mg/Kg-dry	1	3/12/2021 2:49:00 AM

Sample Moisture (Percent Moisture)

Batch ID: R65716

Analyst: mch

Percent Moisture	5.19	0.500		wt%	1	3/9/2021 9:38:42 AM
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Analytical Report

Work Order: 2103086
Date Reported: 3/12/2021

CLIENT: Friedman & Bruya
Project: 103098

Lab ID: 2103086-015

Client Sample ID: DPT-4:GW

Collection Date: 3/4/2021 9:30:00 AM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31577

Analyst: SB

Diazinon	ND	0.197		µg/L	1	3/10/2021 7:19:03 PM
Surr: Triphenylphosphate	108	15.9 - 163		%Rec	1	3/10/2021 7:19:03 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 31574

Analyst: SS

Nitrate (as N)	3.19	1.00	D	mg/L	10	3/6/2021 12:18:00 AM
Ortho-Phosphate (as P)	ND	5.25	D	mg/L	10	3/6/2021 12:18:00 AM

Lab ID: 2103086-016

Client Sample ID: DPT-5:GW

Collection Date: 3/4/2021 10:30:00 AM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31577

Analyst: SB

Diazinon	ND	0.199		µg/L	1	3/10/2021 7:41:19 PM
Surr: Triphenylphosphate	109	15.9 - 163		%Rec	1	3/10/2021 7:41:19 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 31574

Analyst: SS

Nitrate (as N)	4.28	1.00	D	mg/L	10	3/6/2021 12:41:00 AM
Ortho-Phosphate (as P)	ND	5.25	D	mg/L	10	3/6/2021 12:41:00 AM



Analytical Report

Work Order: 2103086
Date Reported: 3/12/2021

CLIENT: Friedman & Bruya
Project: 103098

Lab ID: 2103086-017

Client Sample ID: DPT-6:GW

Collection Date: 3/4/2021 11:45:00 AM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Organophosphorus Pesticides by EPA Method 8270-SIM</u>				Batch ID: 31577		Analyst: SB
Diazinon	ND	0.197		µg/L	1	3/10/2021 8:03:38 PM
Surr: Triphenylphosphate	107	15.9 - 163		%Rec	1	3/10/2021 8:03:38 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 31574 Analyst: SS

Nitrate (as N)	4.39	1.00	D	mg/L	10	3/6/2021 1:04:00 AM
Ortho-Phosphate (as P)	ND	5.25	D	mg/L	10	3/6/2021 1:04:00 AM

Lab ID: 2103086-018

Client Sample ID: DPT-7:GW

Collection Date: 3/4/2021 12:40:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Organophosphorus Pesticides by EPA Method 8270-SIM</u>				Batch ID: 31577		Analyst: SB
Diazinon	ND	0.199		µg/L	1	3/10/2021 8:25:53 PM
Surr: Triphenylphosphate	102	15.9 - 163		%Rec	1	3/10/2021 8:25:53 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 31574 Analyst: SS

Nitrate (as N)	4.32	1.00	D	mg/L	10	3/6/2021 1:27:00 AM
Ortho-Phosphate (as P)	ND	5.25	D	mg/L	10	3/6/2021 1:27:00 AM



Analytical Report

Work Order: 2103086
Date Reported: 3/12/2021

CLIENT: Friedman & Bruya
Project: 103098

Lab ID: 2103086-019

Client Sample ID: DPT-8:GW

Collection Date: 3/4/2021 1:50:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31577

Analyst: SB

Diazinon	ND	0.198		µg/L	1	3/10/2021 8:48:06 PM
Surr: Triphenylphosphate	109	15.9 - 163		%Rec	1	3/10/2021 8:48:06 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 31574

Analyst: SS

Nitrate (as N)	3.11	1.00	D	mg/L	10	3/6/2021 1:51:00 AM
Ortho-Phosphate (as P)	ND	5.25	D	mg/L	10	3/6/2021 1:51:00 AM

Lab ID: 2103086-020

Client Sample ID: DPT-9:GW

Collection Date: 3/4/2021 2:45:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31577

Analyst: SB

Diazinon	ND	0.199		µg/L	1	3/10/2021 9:10:27 PM
Surr: Triphenylphosphate	103	15.9 - 163		%Rec	1	3/10/2021 9:10:27 PM

Ion Chromatography by EPA Method 300.0

Batch ID: 31574

Analyst: SS

Nitrate (as N)	4.93	1.00	D	mg/L	10	3/6/2021 2:14:00 AM
Ortho-Phosphate (as P)	ND	5.25	D	mg/L	10	3/6/2021 2:14:00 AM

Work Order: 2103086
CLIENT: Friedman & Bruya
Project: 103098

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: MB-31574		SampType: MBLK			Units: mg/L		Prep Date: 3/5/2021			RunNo: 65702		
Client ID: MBLKW		Batch ID: 31574			Analysis Date: 3/5/2021					SeqNo: 1321745		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	ND	0.100									
Ortho-Phosphate (as P)	ND	0.525									

Sample ID: LCS-31574		SampType: LCS			Units: mg/L		Prep Date: 3/5/2021			RunNo: 65702		
Client ID: LCSW		Batch ID: 31574			Analysis Date: 3/5/2021			SeqNo: 1321746				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	0.726	0.100	0.7500	0	96.8	90	110				
Ortho-Phosphate (as P)	1.52	0.525	1.250	0	122	90	110				S

NOTES:

S - Outlying spike recovery observed for ortho-phosphate (high bias). Samples are non-detect for this analyte; no further action required.

Sample ID: 2102386-001EDUP		SampType: DUP			Units: mg/L		Prep Date: 3/5/2021			RunNo: 65702		
Client ID: BATCH		Batch ID: 31574			Analysis Date: 3/5/2021			SeqNo: 1321748				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	1.14	1.00						1.170	2.60	20	DH
Ortho-Phosphate (as P)	ND	5.25						0		20	DH

Sample ID: 2102386-001EMS		SampType: MS			Units: mg/L		Prep Date: 3/5/2021			RunNo: 65702		
Client ID: BATCH		Batch ID: 31574			Analysis Date: 3/5/2021			SeqNo: 1321749				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	8.27	1.00	7.500	1.170	94.7	80	120				DH
Ortho-Phosphate (as P)	16.6	5.25	12.50	0	133	80	120				DSH

NOTES:

S - Outlying spike recoveries were associated with this sample.

Work Order: 2103086
CLIENT: Friedman & Bruya
Project: 103098

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: 210386-001EMSD		SampType: MSD		Units: mg/L		Prep Date: 3/5/2021		RunNo: 65702			
Client ID: BATCH		Batch ID: 31574				Analysis Date: 3/5/2021		SeqNo: 1321750			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	8.27	1.00	7.500	1.170	94.7	80	120	8.270	0	20	DH
Ortho-Phosphate (as P)	17.9	5.25	12.50	0	143	80	120	16.59	7.32	20	DSH

NOTES:

S - Outlying spike recoveries were associated with this sample.

Sample ID: 2103086-020ADUP		SampType: DUP		Units: mg/L		Prep Date: 3/5/2021		RunNo: 65702			
Client ID: DPT-9:GW		Batch ID: 31574				Analysis Date: 3/6/2021		SeqNo: 1321764			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	4.85	1.00						4.930	1.64	20	D
Ortho-Phosphate (as P)	ND	5.25						0		20	D

Sample ID: 2103086-020AMS		SampType: MS		Units: mg/L		Prep Date: 3/5/2021		RunNo: 65702			
Client ID: DPT-9:GW		Batch ID: 31574				Analysis Date: 3/6/2021		SeqNo: 1321765			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	12.5	1.00	7.500	4.930	101	80	120				D
Ortho-Phosphate (as P)	15.4	5.25	12.50	0	123	80	120				DS

NOTES:

S - Outlying spike recoveries were associated with this sample.

Work Order: 2103086
CLIENT: Friedman & Bruya
Project: 103098

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: MB-31630		SampType: MBLK			Units: mg/Kg		Prep Date: 3/11/2021			RunNo: 65837		
Client ID: MBLKS		Batch ID: 31630			Analysis Date: 3/11/2021					SeqNo: 1324621		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	ND	1.50									
Orthophosphate (as P)	ND	5.50									

Sample ID: LCS-31630		SampType: LCS			Units: mg/Kg		Prep Date: 3/11/2021			RunNo: 65837		
Client ID: LCSS		Batch ID: 31630			Analysis Date: 3/11/2021			SeqNo: 1324622				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	7.06	1.50	7.500	0	94.1	90	110				
Orthophosphate (as P)	15.8	5.50	12.50	0	127	90	110				S

NOTES:

S - Outlying spike recovery observed (high bias). Samples are non-detect for this analyte; no further action required.

Sample ID: 2103068-001ADUP		SampType: DUP			Units: mg/Kg-dry		Prep Date: 3/11/2021			RunNo: 65837		
Client ID: BATCH		Batch ID: 31630			Analysis Date: 3/11/2021					SeqNo: 1324624		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	ND	1.55						0		30	
Orthophosphate (as P)	ND	5.67						0		30	

Sample ID: 2103068-001AMS		SampType: MS			Units: mg/Kg-dry		Prep Date: 3/11/2021			RunNo: 65837		
Client ID: BATCH		Batch ID: 31630			Analysis Date: 3/11/2021			SeqNo: 1324625				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	7.24	1.55	7.739	0	93.6	80	120				
Orthophosphate (as P)	7.73	5.68	12.90	0	59.9	80	120				S

NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Work Order: 2103086
CLIENT: Friedman & Bruya
Project: 103098

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: 2103068-001AMSD		SampType: MSD			Units: mg/Kg-dry		Prep Date: 3/11/2021			RunNo: 65837		
Client ID: BATCH		Batch ID: 31630			Analysis Date: 3/11/2021					SeqNo: 1324626		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	7.30	1.55	7.735	0	94.4	80	120	7.244	0.789	30	
Orthophosphate (as P)	7.43	5.67	12.89	0	57.6	80	120	7.729	4.01	30	S

NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Sample ID: 2103086-009ADUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 3/11/2021			RunNo: 65837		
Client ID: DPT-7:Surface		Batch ID: 31630					Analysis Date: 3/12/2021			SeqNo: 1324637	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Nitrate (as N)	ND	1.73						0		30	
Orthophosphate (as P)	ND	6.33						0		30	

Sample ID: 2103086-009AMS		SampType: MS			Units: mg/Kg-dry		Prep Date: 3/11/2021			RunNo: 65837		
Client ID: DPT-7:Surface		Batch ID: 31630			Analysis Date: 3/12/2021					SeqNo: 1324638		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	8.00	1.72	8.616	0	92.8	80	120				
Orthophosphate (as P)	ND	6.32	14.36	0	0	80	120				S

NOTES:

S - Outlying spike recoveries were associated with this sample.

Work Order: 2103086
CLIENT: Friedman & Bruya
Project: 103098

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: MB-31584		SampType: MBLK		Units: µg/Kg		Prep Date: 3/8/2021			RunNo: 65748			
Client ID: MBLKS		Batch ID: 31584					Analysis Date: 3/9/2021			SeqNo: 1322723		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	500									
Surr: Triphenylphosphate	950		1,000		95.0	10.4	150				

Sample ID: LCS-31584		SampType: LCS			Units: µg/Kg		Prep Date: 3/8/2021			RunNo: 65748		
Client ID: LCSS		Batch ID: 31584			Analysis Date: 3/9/2021			SeqNo: 1322725				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	181	500	200.0	0	90.5	29.6	138				
Surr: Triphenylphosphate	903		1,000		90.3	10.4	150				

Sample ID: 2103086-003AMS		SampType: MS			Units: µg/Kg-dry		Prep Date: 3/8/2021			RunNo: 65748		
Client ID: SS-1:Surface		Batch ID: 31584			Analysis Date: 3/9/2021			SeqNo: 1322730				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	177	652	260.7	0	67.8	11.5	132				
Surr: Triphenylphosphate	916		1,303		70.3	10.4	150				

Sample ID: 2103086-003AMSD		SampType: MSD			Units: µg/Kg-dry		Prep Date: 3/8/2021			RunNo: 65748		
Client ID: SS-1:Surface		Batch ID: 31584			Analysis Date: 3/9/2021			SeqNo: 1322732				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	181	661	264.3	0	68.3	11.5	132	0		30	
Surr: Triphenylphosphate	890		1,321		67.3	10.4	150		0		

Work Order: 2103086
CLIENT: Friedman & Bruya
Project: 103098

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: MB-31577		SampType: MBLK			Units: µg/L		Prep Date: 3/8/2021			RunNo: 65807		
Client ID: MBLKW		Batch ID: 31577			Analysis Date: 3/10/2021					SeqNo: 1323909		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	0.198									
Surr: Triphenylphosphate	1.91		1.978		96.8	15.9	163				

Sample ID: LCS-31577		SampType: LCS			Units: µg/L		Prep Date: 3/8/2021			RunNo: 65807		
Client ID: LCSW		Batch ID: 31577			Analysis Date: 3/10/2021					SeqNo: 1323910		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	1.97	0.199	1.993	0	99.1	45.3	136				
Surr: Triphenylphosphate	1.83		1.993		91.9	15.9	163				

Sample ID: LCSD-31577		SampType: LCSD			Units: µg/L		Prep Date: 3/8/2021			RunNo: 65807		
Client ID: LCSW02		Batch ID: 31577			Analysis Date: 3/10/2021			SeqNo: 1323911				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	2.01	0.198	1.981	0	101	45.3	136	1.975	1.59	30	
Surr: Triphenylphosphate	2.13		1.981		108	15.9	163		0		

Sample ID: 2103068-003BMS		SampType: MS			Units: µg/L		Prep Date: 3/8/2021			RunNo: 65807		
Client ID: BATCH		Batch ID: 31577			Analysis Date: 3/10/2021					SeqNo: 1323913		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	2.09	0.216	2.162	0	96.8	70	130				
Surr: Triphenylphosphate	1.99		2.162		92.2	15.9	163				

Sample Log-In Check List

Client Name: **FB**
 Logged by: **Carissa True**

Work Order Number: **2103086**
 Date Received: **3/5/2021 9:01:00 AM**

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
 2. How was the sample delivered? Client

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
 4. Shipping container/cooler in good condition? Yes ☒ No ☐
 5. Custody Seals present on shipping container/cooler?
 (Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Present ☒
 6. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
 7. Were all items received at a temperature of >2°C to 6°C * Yes ☒ No ☐ NA ☐
 8. Sample(s) in proper container(s)? Yes ☒ No ☐
 9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
 10. Are samples properly preserved? Yes ☒ No ☐
 11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
 12. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
 13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
 14. Does paperwork match bottle labels? Yes ☒ No ☐
 15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
 16. Is it clear what analyses were requested? Yes ☒ No ☐
 17. Were all holding times able to be met? Yes ☒ No ☐

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: Date:
 By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
 Regarding:
 Client Instructions:

19. Additional remarks:

Item Information

Item #	Temp °C
Sample 1	3.0

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

Send Report To Michael ErdahlCompany Friedman and Bruya, Inc.Address 3012 16th Ave WCity, State, ZIP Seattle, WA 98119Phone # (206) 285-8282 merdahl@friedmanandbruya.com

SUBCONTRACTER

Fremont

PROJECT NAME/NO.

103098

PO #

B-165

REMARKS

Please Email Results EQUIS2103098Page # 1 of 2

TURNAROUND TIME

☒ Standard TAT☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

Page 19 of 20

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED										Notes
						Dioxins/Furans	EPH	VPH	Phosphate	Nitrate	Diazotrin					
DPT-4: Surface		3/4/21	0845	Soil	1				x	x	x					
DPT-4: 2			0850													+ Hold
SS-1: Surface			0939						x	x	x					
DPT-5: Surface			1000						x	x	x					
DPT-5: 2			1010													+ Hold
SS-2: Surface			1033						x	x	x					
DPT-6: Surface			1105						x	x	x					
DPT-6: 2			1115													+ Hold
DPT-7: Surface			1215						x	x	x					
DPT-7: 2			1225													+ Hold
DPT-8: Surface			1325						x	x	x					
DPT-8: 2			1335													+ Hold
DPT-9: Surface			1420						x	x	x					

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE

Relinquished by: Received by: 

Relinquished by: _____

Received by: _____

PRINT NAME

Michael Erdahl

Carter Johnson

COMPANY

Friedman & Bruya

FAI

DATE

3/5/21

3/5/21

TIME

0745 AM

0901

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

2103098

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 3012 16th Ave W

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 merdahl@friedmanandbruya.com

SUBCONTRACTOR <u>Fremont</u>	
PROJECT NAME/NO. <u>103098</u>	PO # <u>B-165</u>
REMARKS <u>Please Email Results EQUIS</u>	

Page # 2 of 2

TURNAROUND TIME
<input checked="" type="checkbox"/> Standard TAT
<input type="checkbox"/> RUSH
Rush charges authorized by: _____
SAMPLE DISPOSAL
<input type="checkbox"/> Dispose after 30 days
<input type="checkbox"/> Return samples
<input type="checkbox"/> Will call with instructions

Page 20 of 20



Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED							Notes
						Dioxins/Furans	EPH	VPH	Phosphate	Nitrate	Diazotrin		
DPT-9:2		3/4/21	1425	Soil	1								+ Hold
DPT-4:6W			0930	H ₂ O					X	X	X		
DPT-5:6W			1030						X	X	X		
DPT-6:6W			1145						X	X	X		
DPT-7:6W			1240						X	X	X		
DPT-8:6W			1350						X	X	X		
DPT-9:6W			1445						X	X	X		

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Michael Erdahl	Friedman & Bruya	3/5/21	0745 AM
Received by: 	Carter Johnson	FBI	3/5/21	0901
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

March 15, 2021

Nate Hinsperger, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 430733-Ichijo, F&BI 103126

Dear Mr Hinsperger:

Included are the results from the testing of material submitted on March 5, 2021 from the 430733-Ichijo, F&BI 103126 project. There are 46 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
TRC0315R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on March 5, 2021 by Friedman & Bruya, Inc. from the TRC Environmental 430733-Ichijo, F&BI 103126 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>TRC Environmental</u>
103126-01	DPT-10:Surface
103126-02	DPT-10:2
103126-03	DPT-11:Surface
103126-04	DPT-11:2
103126-05	SS-3:Surface
103126-06	DPT-12:Surface
103126-07	DPT-12:2
103126-08	DPT-13:Surface
103126-09	DPT-13:2
103126-10	SS-4:Surface
103126-11	DPT-14:Surface
103126-12	DPT-14:2
103126-13	SS-5:Surface
103126-14	DPT-15:Surface
103126-15	DPT-15:2
103126-16	SS-6:Surface
103126-17	DPT-10:GW
103126-18	DPT-11:GW
103126-19	DPT-14:GW
103126-20	DPT-15:GW

The samples marked for analysis were sent to Fremont Analytical for nitrate, phosphate, and diazinon analyses. The report will be forwarded upon receipt.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-10:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-01
Date Analyzed:	03/10/21	Data File:	103126-01.085
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	3.07
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-11:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-03
Date Analyzed:	03/10/21	Data File:	103126-03.086
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	6.76
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	SS-3:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-05
Date Analyzed:	03/10/21	Data File:	103126-05.088
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	5.88
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-12:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/10/21	Lab ID:	103126-06
Date Analyzed:	03/11/21	Data File:	103126-06.065
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	3.07
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-13:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-08
Date Analyzed:	03/11/21	Data File:	103126-08.066
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	6.71
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	SS-4:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-10
Date Analyzed:	03/11/21	Data File:	103126-10.067
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	4.71
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-14:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-11
Date Analyzed:	03/11/21	Data File:	103126-11.068
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	3.03
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	SS-5:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-13
Date Analyzed:	03/11/21	Data File:	103126-13.069
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	5.36
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-15:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-14
Date Analyzed:	03/11/21	Data File:	103126-14.070
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	2.88
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	SS-6:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-16
Date Analyzed:	03/11/21	Data File:	103126-16.071
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	4.38
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	I1-154 mb
Date Analyzed:	03/09/21	Data File:	I1-154 mb.031
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	DPT-10:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-17
Date Analyzed:	03/09/21	Data File:	103126-17.075
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	AP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	DPT-11:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-18
Date Analyzed:	03/09/21	Data File:	103126-18.126
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	AP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	DPT-14:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-19
Date Analyzed:	03/09/21	Data File:	103126-19.127
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	AP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	DPT-15:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-20
Date Analyzed:	03/09/21	Data File:	103126-20.128
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	AP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	I1-156 mb
Date Analyzed:	03/09/21	Data File:	I1-156 mb.033
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	AP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-10:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-17
Date Analyzed:	03/09/21	Data File:	103126-17.118
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	AP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-11:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-18
Date Analyzed:	03/10/21	Data File:	103126-18.065
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	AP

Analyte:	Concentration ug/L (ppb)
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Arsenic	3.18
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-14:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-19 x5
Date Analyzed:	03/10/21	Data File:	103126-19 x5.069
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	AP

Analyte:	Concentration ug/L (ppb)
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Arsenic	18.9
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	DPT-15:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-20
Date Analyzed:	03/09/21	Data File:	103126-20.123
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	AP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	I1-155 mb
Date Analyzed:	03/09/21	Data File:	I1-155 mb.029
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	AP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	DPT-10:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-01
Date Analyzed:	03/08/21	Data File:	030805.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	79	128
Toluene-d8	103	84	121
4-Bromofluorobenzene	102	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	DPT-11:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-03
Date Analyzed:	03/08/21	Data File:	030806.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	79	128
Toluene-d8	108	84	121
4-Bromofluorobenzene	103	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	SS-3:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-05
Date Analyzed:	03/08/21	Data File:	030807.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	79	128
Toluene-d8	103	84	121
4-Bromofluorobenzene	100	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	DPT-12:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-06
Date Analyzed:	03/08/21	Data File:	030808.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	79	128
Toluene-d8	95	84	121
4-Bromofluorobenzene	105	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	DPT-13:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-08
Date Analyzed:	03/08/21	Data File:	030809.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	79	128
Toluene-d8	102	84	121
4-Bromofluorobenzene	100	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	SS-4:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-10
Date Analyzed:	03/08/21	Data File:	030810.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	79	128
Toluene-d8	100	84	121
4-Bromofluorobenzene	104	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	DPT-14:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-11
Date Analyzed:	03/08/21	Data File:	030811.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	79	128
Toluene-d8	101	84	121
4-Bromofluorobenzene	104	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	SS-5:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-13
Date Analyzed:	03/08/21	Data File:	030812.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	79	128
Toluene-d8	102	84	121
4-Bromofluorobenzene	108	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	DPT-15:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-14
Date Analyzed:	03/08/21	Data File:	030813.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	79	128
Toluene-d8	101	84	121
4-Bromofluorobenzene	101	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	SS-6:Surface	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	103126-16
Date Analyzed:	03/08/21	Data File:	030814.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	79	128
Toluene-d8	103	84	121
4-Bromofluorobenzene	103	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/08/21	Lab ID:	01-466 mb
Date Analyzed:	03/08/21	Data File:	030804.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	79	128
Toluene-d8	102	84	121
4-Bromofluorobenzene	101	84	116

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DPT-10:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/09/21	Lab ID:	103126-17
Date Analyzed:	03/09/21	Data File:	030921.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	59	20	121
DBC	120	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DPT-11:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/09/21	Lab ID:	103126-18
Date Analyzed:	03/09/21	Data File:	030922.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	20	121
DBC	109	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DPT-14:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/09/21	Lab ID:	103126-19
Date Analyzed:	03/09/21	Data File:	030923.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	20	121
DBC	85	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DPT-15:GW	Client:	TRC Environmental
Date Received:	03/05/21	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/09/21	Lab ID:	103126-20
Date Analyzed:	03/09/21	Data File:	030924.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	20	121
DBC	109	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	430733-Ichijo, F&BI 103126
Date Extracted:	03/09/21	Lab ID:	01-550 mb
Date Analyzed:	03/09/21	Data File:	030919.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	20	121
DBC	101	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/15/21
Date Received: 03/05/21
Project: 430733-Ichijo, F&BI 103126
Date Extracted: 03/08/21
Date Analyzed: 03/08/21

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR 1,2-DIBROMOETHANE (EDB) BY EPA METHOD 8011 MODIFIED**
Results Reported as µg/L (ppb)

<u>Sample ID</u>	<u>EDB</u>
Laboratory ID	
DPT-10:GW 103126-17	<0.01
DPT-11:GW 103126-18	<0.01
DPT-14:GW 103126-19	<0.01
DPT-15:GW 103126-20	<0.01
Method Blank	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/15/21

Date Received: 03/05/21

Project: 430733-Ichijo, F&BI 103126

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR DISSOLVED METALS USING EPA METHOD 6020B**

Laboratory Code: 103126-17 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	<1	102	103	75-125	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	105	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/15/21

Date Received: 03/05/21

Project: 430733-Ichijo, F&BI 103126

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 103098-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	3.60	97	94	75-125	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	97	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/15/21

Date Received: 03/05/21

Project: 430733-Ichijo, F&BI 103126

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 103086-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	4.95	88	83	75-125	6

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	104	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/15/21

Date Received: 03/05/21

Project: 430733-Ichijo, F&BI 103126

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260D**

Laboratory Code: 103104-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
1,2-Dibromoethane (EDB)	mg/kg (ppm)	1	<0.05	87	46	28-142	62 vo

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
1,2-Dibromoethane (EDB)	mg/kg (ppm)	1	100	74-132

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/15/21

Date Received: 03/05/21

Project: 430733-Ichijo, F&BI 103126

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	ug/L (ppb)	0.25	96	99	52-112	3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/15/21

Date Received: 03/05/21

Project: 430733-Ichijo, F&BI 103126

**QUALITY ASSURANCE RESULTS
FROM THE ANALYSIS OF WATER SAMPLES FOR
1,2-DIBROMOETHANE (EDB) BY EPA METHOD 8011 MODIFIED**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	Percent	Acceptance Criteria	RPD (Limit 10)
			Recovery LCS	Recovery LCSD		
1,2-Dibromoethane	ug/L (ppb)	0.10	111	113	70-130	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

103126

SAMPLE CHAIN OF CUSTODY

MO 03-05-21 VS3/B23/EO4/VW2
Page # 1 of 3Report To Nate HinspergerCompany TRCAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email NHinsperger@trccorp.com

SAMPLERS (signature)

PROJECT NAME

PO #

REMARKS

Direct-bill to Ichijo

INVOICE TO

Project specific RLs? - Yes / No

TURNAROUND TIME

☒ Standard turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Archive samples☐ Other

Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											8011 for EDB in water per NE/NH Notes 3/3/21
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	Phosphate (300) PCEs EPA 8005	As, 6020	1,2-Dibromo-ethane (8260)	Diazinon (827051M)	Nitrate (300)	
DPT-10: Surface	01A-F	3/4/21	1510	Soil	6							X	X	X	X	X	Archive the
DPT-10: 2	02	↓	1520														unchecked
DPT-11: Surface	03	3/5/21	0835									X	X	X	X	X	boxes
DPT-11: 2	04		0845														
SS-3: Surface	05		0902									X	X	X	X	X	
DPT-12: Surface	06		0930									X	X	X	X	X	
DPT-12: 2	07		0935														
DPT-13: Surface	08		1050									X	X	X	X	X	
DPT-13: 2	09		1100														
SS-4: Surface	10	↓	1115	↓	↓							X	X	X	X	X	

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>David Verret</u>	David Verret	TRC	3/5/21	1630
Received by: <u>VINTH</u>	VINTH	FBI	3/5/21	1630
Relinquished by:				
Received by:				
Samples received at <u>5</u> °C				

103126

SAMPLE CHAIN OF CUSTODY™

03-05-21

VS3/BIZ/EO4/VWZ

Report To Nate HinspergerCompany TRCAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email NHinsperger@trccompanies.com

SAMPLERS (signature)

Rebecca Odell

PROJECT NAME

430733- Ichijo USA

PO #

REMARKS

Direct-bill to Ichijo

INVOICE TO

Project specific RLs? - Yes / No

Page # 2 of 3

TURNAROUND TIME

☒ Standard turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Archive samples☐ Other

Default: Dispose after 30 days

						ANALYSES REQUESTED										Notes	
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	Phosphate (300) EPA 8092	As (6020)	1,2-Dibromoeth- ane (8260)	Diazinon (8270514)		Nitrate (300)
DPT-14: Surface	11 A ✓	3/5/21	1145	Soil	6							X	X	X	X	X	Archive the unchecked boxes
DPT-14: 2	12	↓	1150	↓	↓												
SS-5: Surface	13		1205	↓	↓							X	X	X	X	X	
DPT-15: Surface	14		1345	↓	↓							X	X	X	X	X	
DPT-15: 2	15		1350	↓	↓												
SS-6: Surface	16	↓	1425	↓	↓							X	X	X	X	X	

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>David Verral</u>	<u>TRC</u>	<u>3-5-21</u>	<u>1630</u>
Received by: <u>[Signature]</u>	<u>VIK/TH</u>	<u>FBI</u>	<u>3/5/21</u>	<u>1630</u>
Relinquished by:				
Received by:		Samples received at <u>5</u> °C		

103126

SAMPLE CHAIN OF CUSTODY

03-05-21 VS3/BE3/EO4/VW2

Report To Nate Hinsperger
 Company TRC
 Address 1180 NW Maple St, Ste 310
 City, State, ZIP Issaquah, WA 98027
 Phone 425-395-0010 Email NHinsperger@trc.com

SAMPLERS (signature)

Rebecca Odell

PROJECT NAME

430733 - Ichijo

PO #

REMARKS

Direct-bill to Ichijo

INVOICE TO

Project specific RLs? - Yes / No

Page # 3 of 3

TURNAROUND TIME

☒ Standard turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Archive samples☐ Other

Default: Dispose after 30 days

ames.com

						ANALYSES REQUESTED											
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	Diazinon (8270) PCBs EPA 8082	As, Total (6020)	As, Diss. (6020)	1,2-Dibromomethane (8260)	Dieldrin (8081)	Notes
DPT-10: GW	17 AG	3/4/21	1545	H2O	87							X	X	X	X	X	As (Diss.)
DPT-11: GW	18	3/5/21	0900	↓	↓							X	X	X	X	X	is Field
DPT-14: GW	19	↓	1300	↓	↓							X	X	X	X	X	Filtered
DPT-15: GW	30	↓	1420	↓	↓							X	X	X	X	X	

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>David Verret</u>	<u>TRC</u>	<u>3-5-21</u>	<u>1630</u>
Received by: <u>[Signature]</u>	<u>VINH</u>	<u>FB1</u>	<u>3/5/21</u>	<u>1630</u>
Relinquished by:				
Received by:		Samples received at <u>5</u> °C		

ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-101571-1
Client Project/Site: 430733-Ichijo USA

For:
Friedman & Bruya
3012 16TH AVENUE WEST
Seattle, Washington 98119-2029

Attn: Michael Erdahl



Authorized for release by:
3/19/2021 4:15:40 PM
Kristine Allen, Client Service Manager
(253)248-4970

Kristine.Allen@Eurofinset.com

Designee for
Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Definitions	4
Client Sample Results	5
QC Sample Results	9
Chronicle	11
Certification Summary	12
Sample Summary	13
Chain of Custody	14
Receipt Checklists	15



Case Narrative

Client: Friedman & Bruya
Project/Site: 430733-Ichijo USA

Job ID: 580-101571-1

Job ID: 580-101571-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative
580-101571-1

Comments

No additional comments.

Receipt

The samples were received on 3/5/2021 3:25 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.0° C.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Friedman & Bruya
Project/Site: 430733-Ichijo USA

Job ID: 580-101571-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Friedman & Bruya
Project/Site: 430733-Ichijo USA

Job ID: 580-101571-1

Client Sample ID: DPT-10: GW

Lab Sample ID: 580-101571-1

Date Collected: 03/04/21 15:45

Matrix: Water

Date Received: 03/05/21 15:25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	5.3		0.20		mg/L			03/05/21 16:48	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
ortho-Phosphate	ND		0.25		mg/L			03/06/21 10:34	1

Client Sample Results

Client: Friedman & Bruya
Project/Site: 430733-Ichijo USA

Job ID: 580-101571-1

Client Sample ID: DPT-11: GW

Lab Sample ID: 580-101571-2

Date Collected: 03/05/21 09:00

Matrix: Water

Date Received: 03/05/21 15:25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	5.2		0.20		mg/L			03/05/21 17:23	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
ortho-Phosphate	ND		0.25		mg/L			03/06/21 10:34	1

Client Sample Results

Client: Friedman & Bruya
Project/Site: 430733-Ichijo USA

Job ID: 580-101571-1

Client Sample ID: DPT-14: GW

Lab Sample ID: 580-101571-3

Date Collected: 03/05/21 13:00

Matrix: Water

Date Received: 03/05/21 15:25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	6.9		0.20		mg/L			03/05/21 17:35	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
ortho-Phosphate	ND		0.25		mg/L			03/06/21 10:34	1

Client Sample Results

Client: Friedman & Bruya
Project/Site: 430733-Ichijo USA

Job ID: 580-101571-1

Client Sample ID: DPT-15: GW

Lab Sample ID: 580-101571-4

Date Collected: 03/05/21 14:20

Matrix: Water

Date Received: 03/05/21 15:25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	6.5		0.20		mg/L			03/05/21 17:47	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
ortho-Phosphate	ND		0.25		mg/L			03/06/21 10:34	1

QC Sample Results

Client: Friedman & Bruya
Project/Site: 430733-Ichijo USA

Job ID: 580-101571-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-351398/9

Matrix: Water

Analysis Batch: 351398

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.20		mg/L			03/05/21 17:58	1

Lab Sample ID: LCS 580-351398/10

Matrix: Water

Analysis Batch: 351398

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	5.00	5.41		mg/L		108	90 - 110

Lab Sample ID: LCSD 580-351398/13

Matrix: Water

Analysis Batch: 351398

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	5.00	5.46		mg/L		109	90 - 110	1	15

Lab Sample ID: 580-101571-1 MS

Matrix: Water

Analysis Batch: 351398

Client Sample ID: DPT-10: GW

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	5.3		5.00	10.2		mg/L		96	90 - 110

Lab Sample ID: 580-101571-1 MSD

Matrix: Water

Analysis Batch: 351398

Client Sample ID: DPT-10: GW

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	5.3		5.00	10.4		mg/L		100	90 - 110	2	15

Method: 365.1 - Phosphorus, Ortho

Lab Sample ID: MB 580-351425/1

Matrix: Water

Analysis Batch: 351425

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
ortho-Phosphate	ND		0.25		mg/L			03/06/21 10:34	1

Lab Sample ID: LCS 580-351425/2

Matrix: Water

Analysis Batch: 351425

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
ortho-Phosphate	2.00	1.93		mg/L		96	90 - 110

QC Sample Results

Client: Friedman & Bruya
Project/Site: 430733-Ichijo USA

Job ID: 580-101571-1

Method: 365.1 - Phosphorus, Ortho (Continued)

Lab Sample ID: 580-101571-4 MS

Matrix: Water

Analysis Batch: 351425

Client Sample ID: DPT-15: GW

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
ortho-Phosphate	ND		2.00	1.96		mg/L		98	80 - 120		

Lab Sample ID: 580-101571-4 MSD

Matrix: Water

Analysis Batch: 351425

Client Sample ID: DPT-15: GW

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
ortho-Phosphate	ND		2.00	1.97		mg/L		99	80 - 120	1	20

Lab Sample ID: 580-101571-4 DU

Matrix: Water

Analysis Batch: 351425

Client Sample ID: DPT-15: GW

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
ortho-Phosphate	ND			ND		mg/L				NC	20

Lab Chronicle

Client: Friedman & Bruya
Project/Site: 430733-Ichijo USA

Job ID: 580-101571-1

Client Sample ID: DPT-10: GW

Lab Sample ID: 580-101571-1

Date Collected: 03/04/21 15:45

Matrix: Water

Date Received: 03/05/21 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	351398	03/05/21 16:48	AAC	TAL SEA
Total/NA	Analysis	365.1		1	351425	03/06/21 10:34	AAC	TAL SEA

Client Sample ID: DPT-11: GW

Lab Sample ID: 580-101571-2

Date Collected: 03/05/21 09:00

Matrix: Water

Date Received: 03/05/21 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	351398	03/05/21 17:23	AAC	TAL SEA
Total/NA	Analysis	365.1		1	351425	03/06/21 10:34	AAC	TAL SEA

Client Sample ID: DPT-14: GW

Lab Sample ID: 580-101571-3

Date Collected: 03/05/21 13:00

Matrix: Water

Date Received: 03/05/21 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	351398	03/05/21 17:35	AAC	TAL SEA
Total/NA	Analysis	365.1		1	351425	03/06/21 10:34	AAC	TAL SEA

Client Sample ID: DPT-15: GW

Lab Sample ID: 580-101571-4

Date Collected: 03/05/21 14:20

Matrix: Water

Date Received: 03/05/21 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	351398	03/05/21 17:47	AAC	TAL SEA
Total/NA	Analysis	365.1		1	351425	03/06/21 10:34	AAC	TAL SEA

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Friedman & Bruya
Project/Site: 430733-Ichijo USA

Job ID: 580-101571-1

Laboratory: Eurofins TestAmerica, Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-024	02-19-22
ANAB	Dept. of Defense ELAP	L2236	01-19-22
ANAB	ISO/IEC 17025	L2236	01-19-22
California	State	2901	11-05-21
Montana (UST)	State	NA	04-13-21
Oregon	NELAP	WA100007	11-05-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-20-00031	02-10-23

Sample Summary

Client: Friedman & Bruya
Project/Site: 430733-Ichijo USA

Job ID: 580-101571-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-101571-1	DPT-10: GW	Water	03/04/21 15:45	03/05/21 15:25	
580-101571-2	DPT-11: GW	Water	03/05/21 09:00	03/05/21 15:25	
580-101571-3	DPT-14: GW	Water	03/05/21 13:00	03/05/21 15:25	
580-101571-4	DPT-15: GW	Water	03/05/21 14:20	03/05/21 15:25	

1
2
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10
11

Phone 206-446-5926 Email MerdaH1@friedmanand

Rebecca Odell

430733- Ichijo USA

Direct-bill to Ichijo

Project specific RLs? - Yes / No

Default: Dispose after 30 days

580-101571 Chain of Custody

Ph. (206) 285-8282

3/19/2021

Login Sample Receipt Checklist

Client: Friedman & Bruya

Job Number: 580-101571-1

Login Number: 101571

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Hobbs, Kenneth F

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Fremont
Analytical

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Friedman & Bruya
Michael Erdahl
3012 16th Ave. W.
Seattle, WA 98119

RE: 103126
Work Order Number: 2103129

March 16, 2021

Attention Michael Erdahl:

Fremont Analytical, Inc. received 20 sample(s) on 3/8/2021 for the analyses presented in the following report.

Ion Chromatography by EPA Method 300.0
Organophosphorus Pesticides by EPA Method 8270-SIM
Sample Moisture (Percent Moisture)

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.3 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910

Original

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CLIENT: Friedman & Bruya
Project: 103126
Work Order: 2103129

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2103129-001	DPT-10:Surface	03/04/2021 3:10 PM	03/08/2021 12:33 PM
2103129-002	DPT-10:2	03/04/2021 3:20 PM	03/08/2021 12:33 PM
2103129-003	DPT-11:Surface	03/05/2021 8:35 AM	03/08/2021 12:33 PM
2103129-004	DPT-11:2	03/05/2021 8:45 AM	03/08/2021 12:33 PM
2103129-005	SS-3:Surface	03/05/2021 9:02 AM	03/08/2021 12:33 PM
2103129-006	DPT-12:Surface	03/05/2021 9:30 AM	03/08/2021 12:33 PM
2103129-007	DPT-12:2	03/05/2021 9:35 AM	03/08/2021 12:33 PM
2103129-008	DPT-13:Surface	03/05/2021 10:50 AM	03/08/2021 12:33 PM
2103129-009	DPT-13:2	03/05/2021 11:00 AM	03/08/2021 12:33 PM
2103129-010	SS-4:Surface	03/05/2021 11:15 AM	03/08/2021 12:33 PM
2103129-011	DPT-14:Surface	03/05/2021 11:45 AM	03/08/2021 12:33 PM
2103129-012	DPT-14:2	03/05/2021 11:50 AM	03/08/2021 12:33 PM
2103129-013	SS-5:Surface	03/05/2021 12:05 PM	03/08/2021 12:33 PM
2103129-014	DPT-15:Surface	03/05/2021 1:45 PM	03/08/2021 12:33 PM
2103129-015	DPT-15:2	03/05/2021 1:50 PM	03/08/2021 12:33 PM
2103129-016	SS-6:Surface	03/05/2021 2:25 PM	03/08/2021 12:33 PM
2103129-017	DPT-10:GW	03/04/2021 3:45 PM	03/08/2021 12:33 PM
2103129-018	DPT-11:GW	03/05/2021 9:00 AM	03/08/2021 12:33 PM
2103129-019	DPT-14:GW	03/05/2021 1:00 PM	03/08/2021 12:33 PM
2103129-020	DPT-15:GW	03/05/2021 2:20 PM	03/08/2021 12:33 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

CLIENT: Friedman & Bruya
Project: 103126

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- DUP - Sample Duplicate
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MCL - Maximum Contaminant Level
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- REP - Sample Replicate
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 2103129
Date Reported: 3/16/2021

CLIENT: Friedman & Bruya
Project: 103126

Lab ID: 2103129-001

Client Sample ID: DPT-10:Surface

Collection Date: 3/4/2021 3:10:00 PM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31598 Analyst: SB

Diazinon	ND	499		µg/Kg-dry	1	3/10/2021 1:19:17 PM
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Ion Chromatography by EPA Method 300.0

Batch ID: 31652 Analyst: SS

Nitrate (as N)	ND	1.67		mg/Kg-dry	1	3/15/2021 7:00:00 PM
Orthophosphate (as P)	ND	6.12		mg/Kg-dry	1	3/15/2021 7:00:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R65716 Analyst: mch

Percent Moisture	10.2	0.500		wt%	1	3/9/2021 9:38:42 AM
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Lab ID: 2103129-003

Client Sample ID: DPT-11:Surface

Collection Date: 3/5/2021 8:35:00 AM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31598 Analyst: SB

Diazinon	ND	506		µg/Kg-dry	1	3/10/2021 1:41:38 PM
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Ion Chromatography by EPA Method 300.0

Batch ID: 31652 Analyst: SS

Nitrate (as N)	ND	1.56		mg/Kg-dry	1	3/15/2021 7:23:00 PM
Orthophosphate (as P)	ND	5.71		mg/Kg-dry	1	3/15/2021 7:23:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R65752 Analyst: RL

Percent Moisture	3.69	0.500		wt%	1	3/10/2021 9:33:56 AM
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Analytical Report

Work Order: 2103129
Date Reported: 3/16/2021

CLIENT: Friedman & Bruya
Project: 103126

Lab ID: 2103129-005

Client Sample ID: SS-3:Surface

Collection Date: 3/5/2021 9:02:00 AM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Organophosphorus Pesticides by EPA Method 8270-SIM</u>				Batch ID: 31598		Analyst: SB
Diazinon	ND	544		µg/Kg-dry	1	3/10/2021 2:04:06 PM
<u>Ion Chromatography by EPA Method 300.0</u>				Batch ID: 31652		Analyst: SS
Nitrate (as N)	3.21	1.90		mg/Kg-dry	1	3/15/2021 9:41:00 PM
Orthophosphate (as P)	ND	6.96		mg/Kg-dry	1	3/15/2021 9:41:00 PM
<u>Sample Moisture (Percent Moisture)</u>				Batch ID: R65752		Analyst: RL
Percent Moisture	20.9	0.500		wt%	1	3/10/2021 9:33:56 AM

Lab ID: 2103129-006

Client Sample ID: DPT-12:Surface

Collection Date: 3/5/2021 9:30:00 AM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Organophosphorus Pesticides by EPA Method 8270-SIM</u>				Batch ID: 31598		Analyst: SB
Diazinon	ND	503		µg/Kg-dry	1	3/10/2021 12:12:25 PM
<u>Ion Chromatography by EPA Method 300.0</u>				Batch ID: 31652		Analyst: SS
Nitrate (as N)	ND	1.69		mg/Kg-dry	1	3/15/2021 10:05:00 PM
Orthophosphate (as P)	ND	6.18		mg/Kg-dry	1	3/15/2021 10:05:00 PM
<u>Sample Moisture (Percent Moisture)</u>				Batch ID: R65752		Analyst: RL
Percent Moisture	11.0	0.500		wt%	1	3/10/2021 9:33:56 AM



Work Order: 2103129
Date Reported: 3/16/2021

CLIENT: Friedman & Bruya
Project: 103126

Lab ID: 2103129-008

Client Sample ID: DPT-13:Surface

Collection Date: 3/5/2021 10:50:00 AM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Organophosphorus Pesticides by EPA Method 8270-SIM</u>				Batch ID: 31598		Analyst: SB
Diazinon	ND	514		µg/Kg-dry	1	3/10/2021 2:26:37 PM
<u>Ion Chromatography by EPA Method 300.0</u>				Batch ID: 31652		Analyst: SS
Nitrate (as N)	ND	1.69		mg/Kg-dry	1	3/15/2021 10:28:00 PM
Orthophosphate (as P)	ND	6.20		mg/Kg-dry	1	3/15/2021 10:28:00 PM
<u>Sample Moisture (Percent Moisture)</u>				Batch ID: R65752		Analyst: RL
Percent Moisture	11.3	0.500		wt%	1	3/10/2021 9:33:56 AM

Lab ID: 2103129-010

Client Sample ID: SS-4:Surface

Collection Date: 3/5/2021 11:15:00 AM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Organophosphorus Pesticides by EPA Method 8270-SIM</u>				Batch ID: 31598		Analyst: SB
Diazinon	ND	716		µg/Kg-dry	1	3/10/2021 2:49:08 PM
<u>Ion Chromatography by EPA Method 300.0</u>				Batch ID: 31652		Analyst: SS
Nitrate (as N)	3.57	2.30		mg/Kg-dry	1	3/15/2021 10:51:00 PM
Orthophosphate (as P)	ND	8.42		mg/Kg-dry	1	3/15/2021 10:51:00 PM
<u>Sample Moisture (Percent Moisture)</u>				Batch ID: R65752		Analyst: RL
Percent Moisture	34.7	0.500		wt%	1	3/10/2021 9:33:56 AM



Work Order: 2103129
Date Reported: 3/16/2021

CLIENT: Friedman & Bruya
Project: 103126

Lab ID: 2103129-011

Client Sample ID: DPT-14:Surface

Collection Date: 3/5/2021 11:45:00 AM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Organophosphorus Pesticides by EPA Method 8270-SIM</u>				Batch ID: 31598		Analyst: SB
Diazinon	ND	453		µg/Kg-dry	1	3/10/2021 3:11:38 PM
<u>Ion Chromatography by EPA Method 300.0</u>				Batch ID: 31652		Analyst: SS
Nitrate (as N)	ND	1.56		mg/Kg-dry	1	3/15/2021 11:14:00 PM
Orthophosphate (as P)	ND	5.73		mg/Kg-dry	1	3/15/2021 11:14:00 PM
<u>Sample Moisture (Percent Moisture)</u>				Batch ID: R65752		Analyst: RL
Percent Moisture	4.08	0.500		wt%	1	3/10/2021 9:33:56 AM

Lab ID: 2103129-013

Client Sample ID: SS-5:Surface

Collection Date: 3/5/2021 12:05:00 PM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Organophosphorus Pesticides by EPA Method 8270-SIM</u>				Batch ID: 31598		Analyst: SB
Diazinon	ND	661		µg/Kg-dry	1	3/10/2021 3:34:17 PM
<u>Ion Chromatography by EPA Method 300.0</u>				Batch ID: 31652		Analyst: SS
Nitrate (as N)	ND	2.07		mg/Kg-dry	1	3/15/2021 11:37:00 PM
Orthophosphate (as P)	ND	7.58		mg/Kg-dry	1	3/15/2021 11:37:00 PM
<u>Sample Moisture (Percent Moisture)</u>				Batch ID: R65828		Analyst: RL
Percent Moisture	27.4	0.500		wt%	1	3/12/2021 9:51:15 AM



Analytical Report

Work Order: 2103129
Date Reported: 3/16/2021

CLIENT: Friedman & Bruya
Project: 103126

Lab ID: 2103129-014

Client Sample ID: DPT-15:Surface

Collection Date: 3/5/2021 1:45:00 PM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Organophosphorus Pesticides by EPA Method 8270-SIM</u>				Batch ID: 31598		Analyst: SB
Diazinon	ND	506		µg/Kg-dry	1	3/10/2021 3:56:51 PM
<u>Ion Chromatography by EPA Method 300.0</u>				Batch ID: 31652		Analyst: SS
Nitrate (as N)	ND	1.62		mg/Kg-dry	1	3/16/2021
Orthophosphate (as P)	ND	5.96		mg/Kg-dry	1	3/16/2021
<u>Sample Moisture (Percent Moisture)</u>				Batch ID: R65828		Analyst: RL
Percent Moisture	7.68	0.500		wt%	1	3/12/2021 9:51:15 AM

Lab ID: 2103129-016

Client Sample ID: SS-6:Surface

Collection Date: 3/5/2021 2:25:00 PM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Organophosphorus Pesticides by EPA Method 8270-SIM</u>				Batch ID: 31598		Analyst: SB
Diazinon	ND	601		µg/Kg-dry	1	3/10/2021 4:19:23 PM
<u>Ion Chromatography by EPA Method 300.0</u>				Batch ID: 31652		Analyst: SS
Nitrate (as N)	ND	1.81		mg/Kg-dry	1	3/16/2021 12:23:00 AM
Orthophosphate (as P)	ND	6.65		mg/Kg-dry	1	3/16/2021 12:23:00 AM
<u>Sample Moisture (Percent Moisture)</u>				Batch ID: R65828		Analyst: RL
Percent Moisture	17.3	0.500		wt%	1	3/12/2021 9:51:15 AM



Analytical Report

Work Order: 2103129
Date Reported: 3/16/2021

CLIENT: Friedman & Bruya
Project: 103126

Lab ID: 2103129-017

Client Sample ID: DPT-10:GW

Collection Date: 3/4/2021 3:45:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31612

Analyst: SB

Diazinon	ND	0.197		µg/L	1	3/11/2021 1:42:24 PM
Surr: Triphenylphosphate	107	15.9 - 163		%Rec	1	3/11/2021 1:42:24 PM

Lab ID: 2103129-018

Client Sample ID: DPT-11:GW

Collection Date: 3/5/2021 9:00:00 AM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31612

Analyst: SB

Diazinon	ND	0.196		µg/L	1	3/11/2021 2:27:10 PM
Surr: Triphenylphosphate	114	15.9 - 163		%Rec	1	3/11/2021 2:27:10 PM

Lab ID: 2103129-019

Client Sample ID: DPT-14:GW

Collection Date: 3/5/2021 1:00:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31612

Analyst: SB

Diazinon	ND	0.198		µg/L	1	3/11/2021 2:49:37 PM
Surr: Triphenylphosphate	114	15.9 - 163		%Rec	1	3/11/2021 2:49:37 PM



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Analytical Report

Work Order: 2103129
Date Reported: 3/16/2021

CLIENT: Friedman & Bruya

Project: 103126

Lab ID: 2103129-020

Client Sample ID: DPT-15:GW

Collection Date: 3/5/2021 2:20:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 31612

Analyst: SB

Diazinon	ND	0.196		µg/L	1	3/11/2021 3:12:01 PM
Surr: Triphenylphosphate	113	15.9 - 163		%Rec	1	3/11/2021 3:12:01 PM

Work Order: 2103129
CLIENT: Friedman & Bruya
Project: 103126

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: MB-31652		SampType: MBLK			Units: mg/Kg		Prep Date: 3/15/2021			RunNo: 65891		
Client ID: MBLKS		Batch ID: 31652			Analysis Date: 3/15/2021			SeqNo: 1325863				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	ND	1.50									
Orthophosphate (as P)	ND	5.50									

Sample ID: LCS-31652		SampType: LCS			Units: mg/Kg		Prep Date: 3/15/2021			RunNo: 65891		
Client ID: LCSS		Batch ID: 31652			Analysis Date: 3/15/2021			SeqNo: 1325864				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	6.90	1.50	7.500	0	92.0	90	110				
Orthophosphate (as P)	13.2	5.50	12.50	0	105	90	110				

Sample ID: 2103129-003ADUP		SampType: DUP			Units: mg/Kg-dry		Prep Date: 3/15/2021			RunNo: 65891		
Client ID: DPT-11:Surface		Batch ID: 31652			Analysis Date: 3/15/2021					SeqNo: 1325867		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Nitrate (as N)	ND	1.56						0		30	
Orthophosphate (as P)	ND	5.71						0		30	

Sample ID: 2103129-003AMS		SampType: MS			Units: mg/Kg-dry		Prep Date: 3/15/2021		RunNo: 65891		
Client ID: DPT-11:Surface		Batch ID: 31652			Analysis Date: 3/15/2021				SeqNo: 1325868		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Nitrate (as N)	7.05	1.56	7.787	0	90.5	80	120				
Orthophosphate (as P)	ND	5.71	12.98	0	0	80	120				S

NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Work Order: 2103129
CLIENT: Friedman & Bruya
Project: 103126

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: 2103129-003AMSD		SampType: MSD		Units: mg/Kg-dry		Prep Date: 3/15/2021			RunNo: 65891		
Client ID: DPT-11:Surface		Batch ID: 31652		Analysis Date: 3/15/2021			SeqNo: 1325869				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	7.07	1.56	7.787	0	90.8	80	120	7.050	0.294	30	
Orthophosphate (as P)	ND	5.71	12.98	0	0	80	120	0		30	S

NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Work Order: 2103129

CLIENT: Friedman & Bruya

Project: 103126

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: MB-31598		SampType: MBLK			Units: µg/Kg		Prep Date: 3/9/2021			RunNo: 65792		
Client ID: MBLKS		Batch ID: 31598			Analysis Date: 3/10/2021			SeqNo: 1323648				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	500									
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Sample ID: LCS-31598		SampType: LCS			Units: µg/Kg		Prep Date: 3/9/2021			RunNo: 65792		
Client ID: LCSS		Batch ID: 31598			Analysis Date: 3/10/2021					SeqNo: 1323649		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	207	500	200.0	0	104	29.6	138				
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Sample ID: 2103129-006AMS		SampType: MS			Units: µg/Kg-dry		Prep Date: 3/9/2021			RunNo: 65792		
Client ID: DPT-12:Surface		Batch ID: 31598			Analysis Date: 3/10/2021			SeqNo: 1323651				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	141	516	206.3	0	76.7	11.5	132				
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Sample ID: 2103129-006AMSD		SampType: MSD			Units: µg/Kg-dry		Prep Date: 3/9/2021			RunNo: 65792		
Client ID: DPT-12:Surface		Batch ID: 31598			Analysis Date: 3/10/2021			SeqNo: 1323652				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	167	496	198.3	0	94.9	11.5	132	0		30	
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Work Order: 2103129
CLIENT: Friedman & Bruya
Project: 103126

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: MB-31612		SampType: MBLK		Units: µg/L		Prep Date: 3/10/2021			RunNo: 65829			
Client ID: MBLKW		Batch ID: 31612					Analysis Date: 3/11/2021			SeqNo: 1324475		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	ND	0.197									
Surr: Triphenylphosphate	2.40		1.967		122	15.9	163				

Sample ID: LCS-31612		SampType: LCS			Units: µg/L		Prep Date: 3/10/2021			RunNo: 65829		
Client ID: LCSW		Batch ID: 31612			Analysis Date: 3/11/2021			SeqNo: 1324476				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	2.01	0.198	1.977	0	101	45.3	136				
Surr: Triphenylphosphate	1.74		1.977		88.2	15.9	163				

Sample ID: LCSD-31612		SampType: LCSD			Units: µg/L		Prep Date: 3/10/2021			RunNo: 65829		
Client ID: LCSW02		Batch ID: 31612			Analysis Date: 3/11/2021			SeqNo: 1324477				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	2.13	0.200	1.997	0	107	45.3	136	2.005	6.13	30	
Surr: Triphenylphosphate	2.29		1.997		115	15.9	163		0		

Sample ID: 2103129-017AMS		SampType: MS			Units: µg/L		Prep Date: 3/10/2021			RunNo: 65829		
Client ID: DPT-10:GW		Batch ID: 31612			Analysis Date: 3/11/2021			SeqNo: 1324479				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diazinon	2.27	0.207	2.065	0	110	70	130				
Surr: Triphenylphosphate	2.52		2.065		122	15.9	163				

Client Name: **FB**
 Logged by: **Carissa True**

Work Order Number: **2103129**
 Date Received: **3/8/2021 12:33:00 PM**

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
 2. How was the sample delivered? FedEx

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
 4. Shipping container/cooler in good condition? Yes ☒ No ☐
 5. Custody Seals present on shipping container/cooler?
 (Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Present ☒
 6. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
 7. Were all items received at a temperature of >2°C to 6°C * Yes ☒ No ☐ NA ☐
 8. Sample(s) in proper container(s)? Yes ☒ No ☐
 9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
 10. Are samples properly preserved? Yes ☒ No ☐
 11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
 12. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
 13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
 14. Does paperwork match bottle labels? Yes ☒ No ☐
 15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
 16. Is it clear what analyses were requested? Yes ☒ No ☐
 17. Were all holding times able to be met? Yes ☒ No ☐

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:

Item Information

Item #	Temp °C
Sample 1	2.9

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

2103129

Page # 1 of 2

Send Report To Michael ErdahlCompany Friedman and Bruya, Inc.Address 3012 16th Ave WCity, State, ZIP Seattle, WA 98119Phone # (206) 285-8282 merdahl@friedmanandbruya.com

SUBCONTRACTER <u>Fremont</u>	
PROJECT NAME/NO. <u>103126</u>	PO # <u>B-165</u>
REMARKS <u>Please Email Results EQUIS</u>	

TURNAROUND TIME <input checked="" type="checkbox"/> Standard TAT <input type="checkbox"/> RUSH Rush charges authorized by:
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Return samples <input type="checkbox"/> Will call with instructions

Page 17 of 18


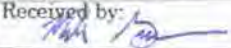
Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED										Notes
						Dioxins/Furans	EPH	VPH	Diazine	Nitrate	Phosphate					
DPT-10: Surface		3/4/21	1510	soil	1				X	X	X					
DPT-10:2		↓	1520		1											+ Hold
DPT-11: Surface		3/5/21	0835		1				X	X	X					
DPT-11:2			0845		1											+ Hold
SS-3: Surface			0902		1				X	X	X					
DPT-12: Surface			0930		1				X	X	X					
DPT-12:2			0935		1											+ Hold
DPT-13: Surface			1050		1				X	X	X					
DPT-13:2			1100		1											+ Hold
SS-4: Surface			1115		1				X	X	X					
DPT-14: Surface			1145		1				X	X	X					
DPT-14:2			1150		1											+ Hold
SS-5: Surface		↓	1205	↓	1				X	X	X					

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Michael Erdahl	Friedman & Bruya	3/8/21	0730
Received by: 	Kiele Braun	FAI	3/8/21	1233
Relinquished by:				
Received by:				

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

2103129

Send Report To Michael Erdahl
 Company Friedman and Bruya, Inc.
 Address 3012 16th Ave W
 City, State, ZIP Seattle, WA 98119
 Phone # (206) 285-8282 merdahl@friedmanandbruya.com

SUBCONTRACTOR <u>Fremont</u>	
PROJECT NAME/NO. <u>103126</u>	PO # <u>B-165</u>
REMARKS <u>Please Email Results EQUIS</u>	


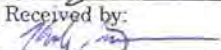
Page # 2 of 2

TURNAROUND TIME
☒ Standard TAT
☐ RUSH
 Rush charges authorized by: _____

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Page 18 of 18

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED										Notes
						Dioxins/Furans	EPH	VPH	Dioxin	Nitrate	Phosphate					
DPT-15: Surface		3/5/21	1345	Soil	1				X	X	X					
DPT-15: 2			1350		1											Hold.
SS-6: Surface			1425		1				X	X	X					
DPT-10: GW		3/4/21	1545	Water	1				X							
DPT-11: GW		3/5/21	0900		1				X							
DPT-14: GW			1300		1				X							
DPT-15: GW			1420		1				X							

Friedman & Bruya, Inc. 3012 16th Avenue West Seattle, WA 98119-2029 Ph. (206) 285-8282 Fax (206) 283-5044	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
	Relinquished by: 	Michael Erdahl	Friedman & Bruya	3/8/21	0730
	Received by: 	Kiele Brown	FAI	3/8/21	1233
	Relinquished by:				
	Received by:				

Attachment E
TEE Cleanup Levels

cas lookup

Analyte	CAS	MTCA Soil Method A - Unrestricted (mg/kg)	Method B Direct Contact (noncancer) (mg/kg)	Method B Direct Contact (cancer) (mg/kg)	Selected Human Health Screening Level (mg/kg)	Target Potable Groundwater Level (ug/L)	Basis	Soil Protective of Groundwater Unsat (mg/kg)	Soil Protective of Groundwater Sat (mg/kg)	TEE Value (mg/kg) (plants)	TEE Value (mg/kg) (soil biota)	TEE Value (mg/kg) (wildlife)	TEE Value (mg/kg) (final)	Notes
Pesticides														
4,4-DDE	72-55-9		24	2.9	2.9	0.26	c	0.45	0.022	x	x	0.75	0.75	0.75 mg/kg for total DDD, DDE, DDT
4,4-DDT	50-29-3	3	40	2.9	2.9	0.26	c	3.5	0.17	x	x	0.75	0.75	0.75 mg/kg for total DDD, DDE, DDT
Beta-BHC	319-85-7		NTV	0.56	0.56	0.049	c	0.0023	0.00012	x	29	6	6	6 mg/kg for total BHC (including lindane)
Delta-BHC	319-86-8		NTV	NTV	NTV					x	29	6	6	6 mg/kg for total BHC (including lindane)
Aldrin	309-00-2		2.4	0.059	0.059	0.0026	c	0.0025	0.00013	x	x	0.1	0.1	
Endosulfan I	959-98-8		NTV	NTV	NTV					x	x	x	4	
Dieldrin	60-57-1		4	0.063	0.063	0.0055	c	0.0028	0.00014	x	x	0.07	0.07	
Endrin	72-20-8		24	NTV	24	2	MCL	0.44	0.022	x	x	0.2	0.2	
Endrin Aldehyde	7421-93-4		NTV	NTV	NTV					x	x	0.01	0.01	

Notes:


c = Carcinogen, Method B calculation using MTCA Equation 720-2.
MCL = Federal drinking water maximum contaminant level or maximum contaminant level goal.
NTV = No Toxicity Value

Attachment F
Conceptual Site Model

Primary Sources	Contaminants of Potential Concern	Media of Concern	Transport Mechanisms
Lawful application of pesticides	Arsenic, 1,2-Dibromoethane, Dieldrin, Diazinon, Nitrate, Phosphate	<input type="checkbox"/> Surface Soil (0–2 feet bgs)	<input type="checkbox"/> Direct release to soil <input type="checkbox"/> Migration to subsurface soil <input type="checkbox"/> Migration to groundwater <input type="checkbox"/> Volatilization <input type="checkbox"/> Runoff or erosion <input type="checkbox"/> Utake by plant or animal <input type="checkbox"/> Other (list) _____
		<input checked="" type="checkbox"/> Soil (> 2 feet bgs)	<input checked="" type="checkbox"/> Direct release to soil <input checked="" type="checkbox"/> Migration to groundwater <input type="checkbox"/> Volatilization <input type="checkbox"/> Other (list) _____
		<input checked="" type="checkbox"/> Groundwater	<input checked="" type="checkbox"/> Release to groundwater <input type="checkbox"/> Volatilization <input type="checkbox"/> Future migration to surface water <input type="checkbox"/> Future migration to sediment <input type="checkbox"/> Uptake by plant or animal <input type="checkbox"/> Other (list) _____
		<input type="checkbox"/> Surface Water	<input type="checkbox"/> Release to surface water <input type="checkbox"/> Volatilization <input type="checkbox"/> Sedimentation <input type="checkbox"/> Uptake by plant or animal <input type="checkbox"/> Other (list) _____
		<input type="checkbox"/> Sediment	<input type="checkbox"/> Release to surface water <input type="checkbox"/> Resuspension or erosion <input type="checkbox"/> Uptake by plant or animal <input type="checkbox"/> Other (list) _____

Exposure Media	Exposure Pathway	Commercial Industrial	Construction Worker	Residential/ Recreational	TEE Receptors
<input checked="" type="checkbox"/> Soil	<input checked="" type="checkbox"/> Ingestion <input checked="" type="checkbox"/> Dermal Exposure	<input type="checkbox"/>	<input type="checkbox"/> C/F	<input type="checkbox"/> C/F	<input type="checkbox"/> C/F
<input checked="" type="checkbox"/> Groundwater	<input checked="" type="checkbox"/> Ingestion <input checked="" type="checkbox"/> Dermal Exposure	<input type="checkbox"/>	<input type="checkbox"/> C/F	<input type="checkbox"/> C/F	<input type="checkbox"/> C/F
<input type="checkbox"/> Air	<input type="checkbox"/> Inhalation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Surface Water	<input type="checkbox"/> Ingestion <input type="checkbox"/> Dermal Contact	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sediment	<input type="checkbox"/> Ingestion <input type="checkbox"/> Dermal Contact	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Indoor Air	<input type="checkbox"/> Inhalation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NOTES:
bgs = below ground surface

ATTACHMENT E CONCEPTUAL SITE MODEL			
PREPARED BY			
REPORT	SUPPLEMENTAL REMEDIAL INVESTIGATION REPORT		
LOCATION	1802 BROOKDALE ROAD EAST, TACOMA, WA		
PREPARED FOR	ICHIJO USA CO., LTD.		
05/20/20	DRAWN BY NDH	REVIEWED BY TCM	PROJECT NUMBER 015397.0004.0000

Attachment G
2019 EPI Remediation Laboratory
Analytical Results

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 10, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 906261

Dear Mr Morin:

Included are the additional results from the testing of material submitted on June 14, 2019 from the Brookdale 74001, F&BI 906261 project. There are 6 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0710R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 14, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 906261 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906261 -01	AOI-2-B-1:2
906261 -02	AOI-2-B-1:3
906261 -03	AOI-2-B-2:2
906261 -04	AOI-2-B-2:3
906261 -05	AOI-2-B-3:2.5
906261 -06	AOI-2-B-3:3.5
906261 -07	AOI-2-B-4:3
906261 -08	AOI-2-B-4:4
906261 -09	AOI-2-B-4:3
906261 -10	AOI-2-B-5:4
906261 -11	AOI-2-E-4-0.5
906261 -12	AOI-2-SW-3:1
906261 -13	AOI-2-SW-1:1
906261 -14	AOI-2-SW-5:1
906261 -15	AOI-2-E-2:0.5
906261 -16	AOI-4-B-9:2
906261 -17	AOI-4-B-9:3
906261 -18	AOI-4-B-1:2
906261 -19	AOI-4-SW-2:2
906261 -20	AOI-4-B-6:2
906261 -21	AOI-4-B-6:3
906261 -22	AOI-4-B-4:2
906261 -23	AOI-4-SW-3:2
906261 -24	AOI-4-B-3:2
906261 -25	AOI-4-B-3:3
906261 -26	AOI-4-SW-4:1
906261 -27	AOI-4-E-5:0.5
906261 -28	AOI-4-B-2:2
906261 -29	AOI-4-B-7:3
906261 -30	AOI-4-B-2:3
906261 -31	AOI-4-B-5:2
906261 -32	AOI-4-E-6:0.5
906261 -33	AOI-4-B-1:3
906261 -34	AOI-4-B-8:2.5
906261 -35	AOI-4-B-4:3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (Continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906261 -36	AOI-4-SW-7:1
906261 -37	AOI-4-B-7:4
906261 -38	AOI-4-B-5:3
906261 -39	AOI-4-B-8:3.5
906261 -40	AOI-4-SW-1:1.5
906261 -41	AOI-4-SW-8:0.8
906261 -42	AOI-4-B-10:2
906261 -43	AOI-4-B-10:3
906261 -44	AOI-4-SW-9:0.5
906261 -45	AOI-4-B-11:2
906261 -46	AOI-4-SW-10:1
906261 -47	AOI-4-B-11:3
906261 -48	AOI-4-B-12:1.5
906261 -49	AOI-4-SW-11:0.5
906261 -50	AOI-4-B-12:2.5
906261 -51	AOI-4-B-13:13.5
906261 -52	AOI-4-B-13:4.5
906261 -53	AOI-4-E-12:0.3
906261 -54	AOI-4-B-14:2.5
906261 -55	DUP-1
906261 -56	AOI-4-B-14:3.5

Dieldrin in the 8081B laboratory control sample exceeded the acceptance criteria. The analyte was not detected in the sample, therefore the data were acceptable.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-3:3	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	07/02/19	Lab ID:	906261-25 1/6
Date Analyzed:	07/05/19	Data File:	070519.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	112	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	07/02/19	Lab ID:	09-1569 mb 1/6
Date Analyzed:	07/03/19	Data File:	070326.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	120	50	150
DBC	153 vo	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/10/19

Date Received: 06/14/19

Project: Brookdale 74001, F&BI 906261

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907001-34 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	117	109	45-130	7

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	145 vo	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

906261

SAMPLE CHAIN OF CUSTODY

ME 06-14-19

Page # 1 of 85

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St, Suite 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email thomm@epi-wa.com
betsy@epi-wa.com

SAMPLERS (signature) <u>Betsy Wing</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001</u>
REMARKS	INVOICE TO <u>EPI</u>

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>1 week / 5 day</u> <u>BL</u> Rush charges authorized by:
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Archive Samples <input type="checkbox"/> Other

						ANALYSES REQUESTED												Notes
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Includ 6081 - Dieldrin	Includ 6081 - Endrin				
A0I-2-B-1:2	01	6/13/19	0825	Soil	1								X					
A0I-2-B-1:3	02	6/13/19	0830		1													HOLD
A0I-2-B-2:2	03	6/13/19	0832		1								X					
A0I-2-B-2:3	04	6/13/19	0840		1													HOLD
A0I-2-B-3:2.5	05	6/13/19	0841		1								X					
A0I-2-B-3:3.5	06	6/13/19	0845		1													HOLD
A0I-2-B-4:3	07	6/13/19	0826		1								X					
A0I-2-B-4:4	08	6/13/19	0830		1													HOLD
A0I-2-B-4:3	09	6/13/19	0847		1									X				
A0I-2-B-5:4	10	10/13/19	0851		1													HOLD

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Betsy Wing</u>	<u>Betsy Wing</u>	<u>EPI</u>	<u>6/14/19</u>	<u>0832</u>
Received by: <u>[Signature]</u>	<u>Michael E. [Signature]</u>	<u>F.R.</u>	<u>6/14/19</u>	<u>1</u>
Relinquished by:				
Received by:		Samples received at <u>4</u> °C		

906261

SAMPLE CHAIN OF CUSTODY

ME 06-14-19

Page # 2 of 2

803

Report To Thom Morin, Betsy Wing

Company EPI

Address 1180 NW Maple St, Suite 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPI

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 5 day 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081	method 8081 - Old data	method 8081 - Full suite	
AOI-2-E-4-0.5	11	6/13/19	0852	Soil	1								X			
AOI-2-SW-3:1	12		0855		1								X			
AOI-2-SW-1:1	13		0856		1								X			
AOI-2-SW-5:1	14		0901		1										X	
AOI-2-E-2:0.5	15		0903		1								X			
AOI-4-B-9:2	16		1022		1								X			
AOI-4-B-9:3	17		1024		1											HOLD
AOI-4-B-1:2	18		1025		1								X			
AOI-4-SW-2:2	19		1027		1								X			
AOI-4-B-6:2	20	↓	1029	↓	1								X			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>Betsy Wing</i>	Betsy Wing	EPI	6/14/19	0832
Received by: <i>Michael Ench</i>	Michael Ench	F&B	6/14/19	↓
Relinquished by:				
Received by:		Samples received at	4 °C	

906261

SAMPLE CHAIN OF CUSTODY

ME 06-14-19

BOS

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St, Suite 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0019 email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPIPage # 3 of 3

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 5-Day

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other _____

ANALYSES REQUESTED																		
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081	method 8081	method 8081	Field Sample	Notes	
AOI-4-B-6:3	21	6/13/19	1033	Soil	1													X per BW 7/2/19 ME
AOI-4-B-4:2	22		1035		1								X					
AOI-4-SW-3:2	23		1041		1								X					
AOI-4-B-3:2	24		1042		1								X					
AOI-4-B-3:3	25		1048		1								X					HOLD
AOI-4-SW-4:1	26		1049		1								X					
AOI-4-E-5:0.5	27		1058		1								X					
AOI-4-B-2:2	28		1059		1								X					
AOI-4-B-7:3	29		1103		1													HOLD
AOI-4-B-2:3	30	✓	1107	✓	1													HOLD

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Betsy Wing</u>	<u>Betsy Wing</u>	<u>EPI</u>	<u>6/14/19</u>	<u>0632</u>
Received by: <u>Michael E. L...</u>	<u>Michael E. L...</u>	<u>FIR</u>	<u>6/14/19</u>	<u>1</u>
Relinquished by:				
Received by:		Samples received at	<u>4</u> °C	

906261

SAMPLE CHAIN OF CUSTODY

ME 06-14-19

4 of 805

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St, Suite 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0000 Email thomm@epi-wa.combetsyw@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPI

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 5-DAY 1 WEEK

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081	method 8081	method 8081	
AOI-4-B-5:2	31	6/13/19	1111	Soil	1								X			
AOI-4-E-6:0.5	32		1119		1								X			
AOI-4-B-1:3	33		1120		1									X		HOLD
AOI-4-B-8:2.5	34		1125		1									X		
AOI-4-B-4:3	35		1138		1											HOLD
AOI-4-SW-7:1	36		1139		1								X			
AOI-4-B-7:4	37		1145		1								X			
AOI-4-B-5:3	38		1151		1											HOLD
AOI-4-B-8:3.5	39		1152		1											HOLD
AOI-4-SW-1:1.5	40	↓	1245	↓	1								X			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Received by:

Relinquished by:

Received by:

Relinquished by:

Received by:

Relinquished by:

Received by:

Betsy Wing
Michael E. LKXEPI
Fa Bm6/14/19 0632
6/14/19 1

Samples received at 4 °C

906261

SAMPLE CHAIN OF CUSTODY

ME 06-14-19 5 of 805

Report To Thom Morin, Betsy Wing

Company EPI

Address 1180 NW Maple St, Suite 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email thomm@epi-wa.com

betsy@epi-wa.com

SAMPLES (signature)

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

EPI

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 5-day 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	named 801- pieldon	named 8081- Full Scale			
AOI-4-SW-8:0.8	41	6/13/19	1403	Soil	1								X				
AOI-4-B-10:2	42		1410		1								X				
AOI-4-B-10:3	43		1411		1												HOLD
AOI-4-SW-9:0.5	44		1414		1								X				
AOI-4-B-11:2	45		1421		1								X				
AOI-4-SW-10:1	46		1426		1								X				
AOI-4-B-11:3	47		1428		1												HOLD
AOI-4-B-12:1.5	48		1430		1								X				
AOI-4-SW-11:0.5	49		1439		1								X				
AOI-4-B-12:2.5	50	✓	1443	✓	1												HOLD

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Betsy Wing	Betsy Wing	EPI	6/14/19	0832
Received by: Michael Eckert	Michael Eckert	F&B	6/14/19	1
Relinquished by:				
Received by:		Samples received at	4	

906261

SAMPLE CHAIN OF CUSTODY

ME 06-14-19 6 of 805

Report To Thom Marin, Betsy WingCompany EPIAddress 1180 NW Maple St, Suite 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email thomm@epi-wa.com
betsy.w@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 5-DAY 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other

						ANALYSES REQUESTED												Notes
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HClD	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081 - Diesel	method 8081 - Full Suite				
A0I-4-B-13:3.5	51	6/13/19	1445	soil	1								X					
A0I-4-B-13:4.5	52		1453		1													HOLD
A0I-4-E-12:0.3	53		1456		1								X					
A0I-4-B-14:2.5	54		1457		1								X					
DWP-1	55				1								X					
A0I-4-B-14:3.5	56	6/13/19	1504		1								◆					HOLD
																		◆ per BW
																		6/21/19 ME

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Betsy Wing</u>	Betsy Wing	EPI	6/14/19	0632
Received by: <u>Michael Erdelt</u>	Michael Erdelt	FR	6/14/19	d
Relinquished by:				
Received by:		Samples received at	4 °C	

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

June 24, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 906261

Dear Mr Morin:

Included are the results from the testing of material submitted on June 14, 2019 from the Brookdale 74001, F&BI 906261 project. There are 47 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0624R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 14, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 906261 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906261 -01	AOI-2-B-1:2
906261 -02	AOI-2-B-1:3
906261 -03	AOI-2-B-2:2
906261 -04	AOI-2-B-2:3
906261 -05	AOI-2-B-3:2.5
906261 -06	AOI-2-B-3:3.5
906261 -07	AOI-2-B-4:3
906261 -08	AOI-2-B-4:4
906261 -09	AOI-2-B-4:3
906261 -10	AOI-2-B-5:4
906261 -11	AOI-2-E-4-0.5
906261 -12	AOI-2-SW-3:1
906261 -13	AOI-2-SW-1:1
906261 -14	AOI-2-SW-5:1
906261 -15	AOI-2-E-2:0.5
906261 -16	AOI-4-B-9:2
906261 -17	AOI-4-B-9:3
906261 -18	AOI-4-B-1:2
906261 -19	AOI-4-SW-2:2
906261 -20	AOI-4-B-6:2
906261 -21	AOI-4-B-6:3
906261 -22	AOI-4-B-4:2
906261 -23	AOI-4-SW-3:2
906261 -24	AOI-4-B-3:2
906261 -25	AOI-4-B-3:3
906261 -26	AOI-4-SW-4:1
906261 -27	AOI-4-E-5:0.5
906261 -28	AOI-4-B-2:2
906261 -29	AOI-4-B-7:3
906261 -30	AOI-4-B-2:3
906261 -31	AOI-4-B-5:2
906261 -32	AOI-4-E-6:0.5
906261 -33	AOI-4-B-1:3
906261 -34	AOI-4-B-8:2.5
906261 -35	AOI-4-B-4:3
906261 -36	AOI-4-SW-7:1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906261 -37	AOI-4-B-7:4
906261 -38	AOI-4-B-5:3
906261 -39	AOI-4-B-8:3.5
906261 -40	AOI-4-SW-1:1.5
906261 -41	AOI-4-SW-8:0.8
906261 -42	AOI-4-B-10:2
906261 -43	AOI-4-B-10:3
906261 -44	AOI-4-SW-9:0.5
906261 -45	AOI-4-B-11:2
906261 -46	AOI-4-SW-10:1
906261 -47	AOI-4-B-11:3
906261 -48	AOI-4-B-12:1.5
906261 -49	AOI-4-SW-11:0.5
906261 -50	AOI-4-B-12:2.5
906261 -51	AOI-4-B-13:13.5
906261 -52	AOI-4-B-13:4.5
906261 -53	AOI-4-E-12:0.3
906261 -54	AOI-4-B-14:2.5
906261 -55	DUP-1
906261 -56	AOI-4-B-14:3.5

The 8081B calibration standard failed the acceptance criteria for several pesticides in the method blank. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-2-B-1:2	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-01 1/6
Date Analyzed:	06/14/19	Data File:	061434.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-2-B-2:2	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-03 1/6
Date Analyzed:	06/14/19	Data File:	061435.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-2-B-3:2.5	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-05 1/6
Date Analyzed:	06/14/19	Data File:	061436.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-2-B-4:3	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-07 1/6
Date Analyzed:	06/15/19	Data File:	061437.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-2-B-4:3	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-09 1/6
Date Analyzed:	06/15/19	Data File:	061506.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-2-E-4-0.5	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-11 1/6
Date Analyzed:	06/15/19	Data File:	061439.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.014

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-2-SW-3:1	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-12 1/6
Date Analyzed:	06/15/19	Data File:	061440.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-2-SW-1:1	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-13 1/6
Date Analyzed:	06/15/19	Data File:	061516.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-2-SW-5:1	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-14 1/6
Date Analyzed:	06/15/19	Data File:	061508.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	91	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.11
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-2-E-2:0.5	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-15 1/6
Date Analyzed:	06/15/19	Data File:	061517.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-9:2	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-16 1/6
Date Analyzed:	06/15/19	Data File:	061518.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-1:2	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-18 1/6
Date Analyzed:	06/15/19	Data File:	061519.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-2:2	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-19 1/6
Date Analyzed:	06/15/19	Data File:	061520.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.020

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-6:2	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-20 1/6
Date Analyzed:	06/15/19	Data File:	061521.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-4:2	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-22 1/6
Date Analyzed:	06/15/19	Data File:	061522.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-3:2	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-23 1/300
Date Analyzed:	06/15/19	Data File:	061523.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	101 d	50	150
DBC	655 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	5.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-3:2	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-24 1/6
Date Analyzed:	06/15/19	Data File:	061514.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69 d	50	150
DBC	95 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.067

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-4:1	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-26 1/6
Date Analyzed:	06/14/19	Data File:	061411.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-E-5:0.5	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-27 1/300
Date Analyzed:	06/15/19	Data File:	061524.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	116	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	3.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-2:2	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-28 1/6
Date Analyzed:	06/15/19	Data File:	061515.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.016

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-5:2	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-31 1/6
Date Analyzed:	06/14/19	Data File:	061416.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-E-6:0.5	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-32 1/6
Date Analyzed:	06/14/19	Data File:	061417.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.40

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-8:2.5	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-34 1/6
Date Analyzed:	06/15/19	Data File:	061507.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-7:1	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-36 1/6
Date Analyzed:	06/14/19	Data File:	061418.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	56	50	150
DBC	73	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-7:4	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-37 1/6
Date Analyzed:	06/14/19	Data File:	061419.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-1:1.5	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-40 1/6
Date Analyzed:	06/14/19	Data File:	061420.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-8:0.8	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-41 1/6
Date Analyzed:	06/14/19	Data File:	061421.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	73	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-10:2	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-42 1/6
Date Analyzed:	06/14/19	Data File:	061424.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-9:0.5	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-44 1/6
Date Analyzed:	06/18/19	Data File:	061735.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	73	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-11:2	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-45 1/6
Date Analyzed:	06/14/19	Data File:	061425.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.024

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-10:1	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-46 1/6
Date Analyzed:	06/14/19	Data File:	061426.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	56	50	150
DBC	69	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-12:1.5	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-48 1/6
Date Analyzed:	06/14/19	Data File:	061427.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	58	50	150
DBC	70	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-11:0.5	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-49 1/6
Date Analyzed:	06/14/19	Data File:	061428.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.012

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-13:13.5	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-51 1/6
Date Analyzed:	06/14/19	Data File:	061429.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	57	50	150
DBC	73	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-E-12:0.3	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-53 1/6
Date Analyzed:	06/14/19	Data File:	061430.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-14:2.5	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-54 1/6
Date Analyzed:	06/14/19	Data File:	061431.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	55	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.089

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-1	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	906261-55 1/6
Date Analyzed:	06/14/19	Data File:	061432.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	09-1400 mb 1/6
Date Analyzed:	06/14/19	Data File:	061407.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/17/19	Lab ID:	09-1422 mb 1/6
Date Analyzed:	06/18/19	Data File:	061809.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 906261
Date Extracted:	06/14/19	Lab ID:	09-1391 mb2 1/6
Date Analyzed:	06/14/19	Data File:	061408.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	88	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01 ca
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01 ca
Toxaphene	<1 ca

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/24/19

Date Received: 06/14/19

Project: Brookdale 74001, F&BI 906261

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906261-27 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	2.6 ve	0 b	155 b	45-130	201 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	81	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/24/19

Date Received: 06/14/19

Project: Brookdale 74001, F&BI 906261

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906296-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.017	71	78	45-130	9

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	85	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/24/19

Date Received: 06/14/19

Project: Brookdale 74001, F&BI 906261

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906148-16 1/6 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	<0.01	<0.01	nm
gamma-BHC (Lindane)	mg/kg (ppm)	<0.01	<0.01	nm
beta-BHC	mg/kg (ppm)	<0.01	<0.01	nm
delta-BHC	mg/kg (ppm)	<0.01	<0.01	nm
Heptachlor	mg/kg (ppm)	<0.01	<0.01	nm
Aldrin	mg/kg (ppm)	<0.01	<0.01	nm
Heptachlor Epoxide	mg/kg (ppm)	<0.01	<0.01	nm
trans-Chlordane	mg/kg (ppm)	<0.01	<0.01	nm
cis-Chlordane	mg/kg (ppm)	<0.01	<0.01	nm
4,4'-DDE	mg/kg (ppm)	<0.01	<0.01	nm
Endosulfan I	mg/kg (ppm)	<0.01	<0.01	nm
Dieldrin	mg/kg (ppm)	<0.01	<0.01	nm
Endrin	mg/kg (ppm)	<0.01	<0.01	nm
4,4'-DDD	mg/kg (ppm)	<0.01	<0.01	nm
Endosulfan II	mg/kg (ppm)	<0.01	<0.01	nm
4,4'-DDT	mg/kg (ppm)	<0.01	<0.01	nm
Endrin Aldehyde	mg/kg (ppm)	<0.01	<0.01	nm
Methoxychlor	mg/kg (ppm)	<0.01	<0.01	nm
Endosulfan Sulfate	mg/kg (ppm)	<0.01	<0.01	nm
Endrin Ketone	mg/kg (ppm)	<0.01	<0.01	nm
Toxaphene	mg/kg (ppm)	<1	<1	nm

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/24/19

Date Received: 06/14/19

Project: Brookdale 74001, F&BI 906261

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR ORGANOCHLORINE PESTICIDES BY EPA METHOD 8081B

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	83	79	56-113	5
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	85	83	58-120	2
beta-BHC	mg/kg (ppm)	0.1	89	90	70-130	1
delta-BHC	mg/kg (ppm)	0.1	92	95	70-130	3
Heptachlor	mg/kg (ppm)	0.1	88	86	56-124	2
Aldrin	mg/kg (ppm)	0.1	89	88	70-130	1
Heptachlor Epoxide	mg/kg (ppm)	0.1	89	90	70-130	1
trans-Chlordane	mg/kg (ppm)	0.1	88	91	60-123	3
cis-Chlordane	mg/kg (ppm)	0.1	93	97	70-130	4
4,4'-DDE	mg/kg (ppm)	0.1	91	93	70-130	2
Endosulfan I	mg/kg (ppm)	0.1	87	89	62-124	2
Dieldrin	mg/kg (ppm)	0.1	90	92	70-130	2
Endrin	mg/kg (ppm)	0.1	92	97	56-147	5
4,4'-DDD	mg/kg (ppm)	0.1	94	98	54-137	4
Endosulfan II	mg/kg (ppm)	0.1	83	86	42-140	4
4,4'-DDT	mg/kg (ppm)	0.1	90	94	25-169	4
Endrin Aldehyde	mg/kg (ppm)	0.1	79	75	21-135	5
Methoxychlor	mg/kg (ppm)	0.1	90	94	54-154	4
Endosulfan Sulfate	mg/kg (ppm)	0.1	91	94	39-148	3
Endrin Ketone	mg/kg (ppm)	0.1	91	95	46-134	4
Toxaphene	mg/kg (ppm)	4	89	90	56-145	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

906261

SAMPLE CHAIN OF CUSTODY

ME 06-14-19

Page # 1 of 805

Report To Thom Morin, Betsy Wing

Company EPI

Address 1180 NW Maple St, Suite 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email thom@epi-ia.com
betsy@epi-ia.com

SAMPLERS (signature)

PROJECT NAME

Brookdale

REMARKS

PO #

74001

INVOICE TO

EPI

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 WEEK 5-day BLW

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HClD	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Included 8081 - Dieldrin	Included 8081 - Full	Notes
AOI-2-B-1:2	01	6/13/19	0825	Soil	1								X		
AOI-2-B-1:3	02	6/13/19	0830		1										HOLD
AOI-2-B-2:2	03	6/13/19	0832		1								X		
AOI-2-B-2:3	04	6/13/19	0840		1										HOLD
AOI-2-B-3:2.5	05	6/13/19	0841		1								X		
AOI-2-B-3:3.5	06	6/13/19	0845		1										HOLD
AOI-2-B-4:3	07	6/13/19	0826		1								X		
AOI-2-B-4:4	08	6/13/19	0830		1										HOLD
AOI-2-B-4:3	09	6/13/19	0847		1									X	
AOI-2-B-5:4	10	6/13/19	0851		1										HOLD

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Received by:

Relinquished by:

Received by:

Betsy Wing
Michael E. C. C.EPI
F.R.N.6/14/19 0832
6/14/19 1

Samples received at 4 °C

906261

SAMPLE CHAIN OF CUSTODY

ME 06-14-19 Page # 2 of 2 \$ 805

Report To Thom Morin, Betsy Wing
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

PO #

Brookdale

74001

REMARKS

INVOICE TO

EPI

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 5 day 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other

ANALYSES REQUESTED

123456789101112131415161718192021222324252627282930313233343536373839404142434445464748495051525354555657585960616263646566676869707172737475767778798081828384858687888990919293949596979899100						ANALYSES REQUESTED										
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081	method 8081 - Oldenburg	method 8081 - Full Suite	Notes
AOI-2-E-4-0.5	11	6/13/19	0852	soil	1								X			
AOI-2-SW-3:1	12		0855		1								X			
AOI-2-SW-1:1	13		0856		1								X			
AOI-2-SW-5:1	14		0901		1									X		
AOI-2-E-2:0.5	15		0903		1								X			
AOI-4-B-9:2	16		1022		1								X			
AOI-4-B-9:3	17		1024		1											HOLD
AOI-4-B-1:2	18		1025		1								X			
AOI-4-SW-2:2	19		1027		1								X			
AOI-4-B-6:2	20	✓	1029	✓	1								X			

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by:

Received by:

Relinquished by:

Received by:

Betsy Wing

Michael Ench

EPI

F&B

6/14/19 0832

6/14/19 ✓

Samples received at 4 °C

906261

SAMPLE CHAIN OF CUSTODY

ME 06-14-19

Page # 3 of 3

BOS

Report To Thom Morin, Betsy Wing

Company EPI

Address 1180 NW Maple St, Suite 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0019 Email thomm@epi-wa.com

betsyw@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 5-DAY

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other

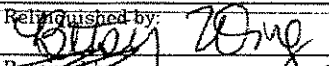
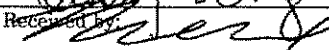
USEPA 8160-GC/MS						ANALYSES REQUESTED													
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081- Oral Swab	method 8081- Full Swab				Notes	
AOI-4-B-6:3	21	6/13/19	1033	Soil	1													HOLD	
AOI-4-B-4:2	22		1035		1								X						
AOI-4-SW-3:2	23		1041		1								X						
AOI-4-B-3:2	24		1042		1								X						
AOI-4-B-3:3	25		1048		1													HOLD	
AOI-4-SW-4:1	26		1049		1								X						
AOI-4-E-5:0.5	27		1058		1								X						
AOI-4-B-2:2	28		1059		1								X						
AOI-4-B-7:3	29		1103		1													HOLD	
AOI-4-B-2:3	30	↓	1107	↓	1													HOLD	

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Betsy Wing	EPI	6/14/19	0632
Received by: 	M. L. E. L. W.	FIR	6/14/19	1
Relinquished by:				
Received by:		Samples received at	4 °C	

906261

SAMPLE CHAIN OF CUSTODY

ME 06-14-19

4

BOS

Report To Thom Marin, Betsy WingCompany EPIAddress 1180 NW Maple St, Suite 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0000 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 2-3 day 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8061	Dielectric	Method 8081	
AOI-4-B-5:2	31	6/13/19	1111	Soil	1								X			
AOI-4-E-6:0.5	32		1119		1								X			
AOI-4-B-1:3	33		1120		1									X		HOLD
AOI-4-B-8:2.5	34		1125		1									X		
AOI-4-B-4:3	35		1138		1											HOLD
AOI-4-SW-7:1	36		1139		1								X			
AOI-4-B-7:4	37		1145		1								X			
AOI-4-B-5:3	38		1151		1											HOLD
AOI-4-B-8:3.5	39		1152		1											HOLD
AOI-4-SW-1:1.5	40	↓	1245	↓	1								X			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Betsy Wing</u>	<u>Betsy Wing</u>	<u>EPI</u>	<u>6/14/19</u>	<u>0632</u>
Received by: <u>[Signature]</u>	<u>Michael E. CLK</u>	<u>Fa Bm</u>	<u>6/14/19</u>	<u>6</u>
Relinquished by:				
Received by:		Samples received at	<u>4 °C</u>	

906261

SAMPLE CHAIN OF CUSTODY

ME 06-14-19 5 of 805

Report To Thom Morin, Betsy Wing

Company EPI

Address 1180 NW Maple St, Suite 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email thomm@epi-wa.com

betsy.w@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 5-day 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	MW 801-1000	Diurnal	MW 801-1000	
AOI-4-SW-8:0.8	41	6/13/19	1403	Soil	1								X			
AOI-4-B-10:2	42		1410		1								X			
AOI-4-B-10:3	43		1411		1											HOLD
AOI-4-SW-9:0.5	44		1414		1								X			
AOI-4-B-11:2	45		1421		1								X			
AOI-4-SW-10:1	46		1426		1								X			
AOI-4-B-11:3	47		1428		1											HOLD
AOI-4-B-12:1.5	48		1430		1								X			
AOI-4-SW-11:0.5	49		1439		1								X			
AOI-4-B-12:2.5	50	✓	1443	✓	1											HOLD

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Betsy Wing	Betsy Wing	EPI	6/14/19	0632
Received by: Michael Eckert	Michael Eckert	F&B	6/14/19	1
Relinquished by:				
Received by:		Samples received at	4	

906261

SAMPLE CHAIN OF CUSTODY

ME 06-14-19 6 of 805

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St, Suite 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0000 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 5-day 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other

ANALYSES REQUESTED

Analysis of Sample						ANALYSES REQUESTED										
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081 - Diesel	method 8081 Full Suite	Notes	
AOI-4-B-13:3.5	51	6/13/19	1445	soil	1								X			
AOI-4-B-13:4.5	52	↓	1453		1											HOLD
AOI-4-E-12:0.3	53	↓	1456		1								X			
AOI-4-B-14:2.5	54	↓	1457		1								X			
DUP-1	55	—	—		1								X			
AOI-4-B-14:3.5	56	6/13/19	1504		1								◆			HOLD
																◆ - per BW
																6/21/19 ME
				↓												

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Received by:

Relinquished by:

Received by:

Betsy Wing
Michael ErdeltEPI
FEB6/14/19 0632
6/14/19 dSamples received at 4th

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 1, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 906296

Dear Mr Morin:

Included are the additional results from the testing of material submitted on June 14, 2019 from the Brookdale 74001.1, F&BI 906296 project. There are 5 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0701R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 14, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 906296 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906296 -01	AOI-4-SW-13:0.9
906296 -02	AOI-4-B-15:0.8
906296 -03	AOI-4-SW-14:1.0
906296 -04	AOI-4-B-18:0.8
906296 -05	AOI-4-B-15:1.8
906296 -06	AOI-4-B-18:1.8
906296 -07	AOI-4-B-17:2
906296 -08	AOI-4-B-17:3
906296 -09	AOI-4-B-16:2
906296 -10	AOI-4-B-19:2
906296 -11	AOI-4-B-16:1
906296 -12	AOI-4-B-19:3
906296 -13	AOI-4-B-21:1.5
906296 -14	AOI-4-B-20:1.0
906296 -15	AOI-4-B-22:1.8
906296 -16	AOI-4-B-20:2
906296 -17	AOI-4-B-21:0.5
906296 -18	AOI-4-B-22:0.8
906296 -19	AOI-5-B-1:1.5
906296 -20	AOI-5-B-1:2.5
906296 -21	AOI-5-B-7:1
906296 -22	AOI-5-B-2:1.5
906296 -23	DUP-3
906296 -24	AOI-5-B-7:2
906296 -25	AOI-5-B-2:2.5
906296 -26	AOI-5-B-6:1
906296 -27	AOI-5-B-3:2
906296 -28	AOI-5-B-3:3
906296 -29	AOI-5-B-4:2
906296 -30	AOI-5-B-6:2
906296 -31	AOI-B-4:3
906296 -32	DUP-2
906296 -33	AOI-5-B-5:2
906296 -34	AOI-5-B-5:3

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-B-2:2.5	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001.1
Date Extracted:	06/25/19	Lab ID:	906296-25 1/6
Date Analyzed:	06/25/19	Data File:	062548.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.010

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1
Date Extracted:	06/25/19	Lab ID:	09-1486 mb 1/6
Date Analyzed:	06/25/19	Data File:	062527.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	97	50	150
DBC	109	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/01/19

Date Received: 06/14/19

Project: Brookdale 74001.1, F&BI 906296

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906474-33 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	92	95	45-130	3

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	107	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

906296

SAMPLE CHAIN OF CUSTODY

ME 06-14-19

Page # 1 of 1

605

Report To Thom Marin, Betzy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email thomm@epi-wa.com
betzyw@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☐ Standard Turnaround☐ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081- Oilfield	Method 8081- Full Suite	Notes
A01-4-SW-13:0.9	01	6/14/19	0756	Soil	1								X		
A01-4-SW-15:0.8	02		0801		1								X		
A01-4-SW-14:1.0	03		0810		1								X		
A01-4-B-18:0.8	04		0819		1									X	
A01-4-B-15:1.8	05		0828		1										HOLD
A01-4-B-18:1.8	06		0835		1										HOLD
A01-4-B-17:2	07		0847		1								⊗ - per RB 6/17/19		HOLD
A01-4-B-17:3	08		0907		1										HOLD
A01-4-B-16:2	09		0915		1										HOLD
A01-4-B-19:2	10		0941		1									X	

Samples received at 4 of

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebeca Becerra</u>	Rebeca Becerra	EPI	6/14/19	1545
Received by: <u>Michael E. Hill</u>	Michael E. Hill	F&B Inc.	6/14/19	1546
Relinquished by:				
Received by:				

Samples received at 7 of

SAMPLE CHAIN OF CUSTODY

ME 06-14-18 Page # 2 of 805

Report To Thom Morin; Betsy Wing
 Company EPI
 Address 1180 NW Maple St, Ste 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature) Betsy Wing
 PROJECT NAME Brookdale PO # 74001-1
 REMARKS INVOICE TO EPI

TURNAROUND TIME
☐ Standard Turnaround
☒ RUSH 1 week
 Rush charges authorized by:
 SAMPLE DISPOSAL
☐ Dispose after 30 days
☒ Archive Samples
☐ Other

						ANALYSES REQUESTED													
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HClD	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081- Dieldrin	Method 8081- Full Suite			Notes		
A01-4-B-16:1	11	6/14/19	0841	Soil	1								X						
A01-4-B-19:3	12	↓	0949	↓	1													HOLD	
A01-4-B-21:1.5	13		0950		1														HOLD
A01-4-B-20:1.0	14		0959		1										X				
A01-4-B-22:1.8	15		1000		1														HOLD
A01-4-B-20:2	16		1009		1														HOLD
A01-4-B-21:0.5	17		1037		1										X				
A01-4-B-22:0.8	18		1049		1										X				
A01-5-B-1:1.5	19		1211		1										X				
A01-5-B-1:2.5	20	↓	1225	↓	1													HOLD	

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebeca Becerra</u>	Rebeca Becerra	EPI	6/14/19	1546
Received by: <u>Michael Endlich</u>	Michael Endlich	FeBn	↓	1546
Relinquished by:				
Received by:				

SAMPLE CHAIN OF CUSTODY

ME 06-14-18 Page # 3 of 805

Report To Thom Morin, Betsy Wing
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLES (signature) Rebecca Becerra
 PROJECT NAME Brookdale PO # 74001.1
 REMARKS INVOICE TO EPI

TURNAROUND TIME
☐ Standard Turnaround
☒ RUSH 1 week
 Rush charges authorized by:
 SAMPLE DISPOSAL
☐ Dispose after 30 days
☒ Archive Samples
☐ Other

						ANALYSES REQUESTED											Notes
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 Diesel	Method 8081 Full Suite			
AOI-5-B-7:1	21	6/14/19	1226	soil	1								X				◆ - per BW
AOI-5-B-2:1.5	22		1241		1								X				6/21/19 ME
DUP-3	23		—		1								X				
AOI-5-B-7:2	24		1250		1												HOLD
AOI-5-B-2:2.5	25		1253		1								◆				HOLD
AOI-5-B-6:1	26		1309		1								X				
AOI-5-B-3:2	27		1311		1								X				
AOI-5-B-3:3	28		1319		1												HOLD
AOI-5-B-4:2	29		1329		1								X				
AOI-5-B-6:2	30		1338		1												HOLD

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebecca Becerra</u>	<u>Rebecca Becerra</u>	<u>EPI</u>	<u>6/14/19</u>	<u>1540</u>
Received by: <u>Michael Erdahl</u>	<u>Michael Erdahl</u>	<u>F&B</u>	<u>6</u>	<u>4</u>
Relinquished by:				
Received by:				

906296

SAMPLE CHAIN OF CUSTODY

ME 06-14-19

Page # 4 of

BOS

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St Suite 310City, State, ZIP Issaquah, WA 98027Phone 425-375-0810 Email thomm@epi-wa.com
betsy.w@epi-wa.com

SAMPLER'S (Signature)

PROJECT NAME

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

- ☐ Standard Turnaround
☒ RUSH 1 week
 Rush charges authorized by:

SAMPLE DISPOSAL

- ☐ Dispose after 30 days
☒ Archive Samples
☐ Other

						ANALYSES REQUESTED												Notes
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081	Method 8081	Method 8081	Method 8081	Method 8081	
ADI-B-4:3	31	6/14/19	1341	Soil	1													HOLD
DUP-2	32	↓	—	↓	1								X					
ADI-5-B-5:2	33	↓	1349	↓	1								X					
ADI-5-B-5:3	34	↓	1411	↓	1													HOLD

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebecca Becerra</u>	<u>Rebecca Becerra</u>	<u>EPI</u>	<u>6/14/19</u>	<u>1546</u>
Received by: <u>[Signature]</u>	<u>Michael Eckel</u>	<u>FIRN</u>	<u>6/14/19</u>	<u>1546</u>
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

June 24, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 906296

Dear Mr Morin:

Included are the results from the testing of material submitted on June 14, 2019 from the Brookdale 74001.1, F&BI 906296 project. There are 24 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0624R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 14, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 906296 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906296 -01	AOI-4-SW-13:0.9
906296 -02	AOI-4-B-15:0.8
906296 -03	AOI-4-SW-14:1.0
906296 -04	AOI-4-B-18:0.8
906296 -05	AOI-4-B-15:1.8
906296 -06	AOI-4-B-18:1.8
906296 -07	AOI-4-B-17:2
906296 -08	AOI-4-B-17:3
906296 -09	AOI-4-B-16:2
906296 -10	AOI-4-B-19:2
906296 -11	AOI-4-B-16:1
906296 -12	AOI-4-B-19:3
906296 -13	AOI-4-B-21:1.5
906296 -14	AOI-4-B-20:1.0
906296 -15	AOI-4-B-22:1.8
906296 -16	AOI-4-B-20:2
906296 -17	AOI-4-B-21:0.5
906296 -18	AOI-4-B-22:0.8
906296 -19	AOI-5-B-1:1.5
906296 -20	AOI-5-B-1:2.5
906296 -21	AOI-5-B-7:1
906296 -22	AOI-5-B-2:1.5
906296 -23	DUP-3
906296 -24	AOI-5-B-7:2
906296 -25	AOI-5-B-2:2.5
906296 -26	AOI-5-B-6:1
906296 -27	AOI-5-B-3:2
906296 -28	AOI-5-B-3:3
906296 -29	AOI-5-B-4:2
906296 -30	AOI-5-B-6:2
906296 -31	AOI-B-4:3
906296 -32	DUP-2
906296 -33	AOI-5-B-5:2
906296 -34	AOI-5-B-5:3

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-13:0.9	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001.1, F&BI 906296
Date Extracted:	06/17/19	Lab ID:	906296-01 1/6
Date Analyzed:	06/17/19	Data File:	061717.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-15:0.8	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001.1, F&BI 906296
Date Extracted:	06/17/19	Lab ID:	906296-02 1/6
Date Analyzed:	06/17/19	Data File:	061718.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.032

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-14:1.0	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001.1, F&BI 906296
Date Extracted:	06/17/19	Lab ID:	906296-03 1/6
Date Analyzed:	06/17/19	Data File:	061719.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.094

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-18:0.8	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001.1, F&BI 906296
Date Extracted:	06/17/19	Lab ID:	906296-04 1/6
Date Analyzed:	06/18/19	Data File:	061810.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-17:2	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001.1, F&BI 906296
Date Extracted:	06/17/19	Lab ID:	906296-07 1/6
Date Analyzed:	06/17/19	Data File:	061720.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-19:2	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001.1, F&BI 906296
Date Extracted:	06/17/19	Lab ID:	906296-10 1/6
Date Analyzed:	06/18/19	Data File:	061811.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-16:1	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001.1, F&BI 906296
Date Extracted:	06/17/19	Lab ID:	906296-11 1/6
Date Analyzed:	06/17/19	Data File:	061721.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.037

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-20:1.0	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001.1, F&BI 906296
Date Extracted:	06/17/19	Lab ID:	906296-14 1/6
Date Analyzed:	06/18/19	Data File:	061812.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-21:0.5	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001.1, F&BI 906296
Date Extracted:	06/17/19	Lab ID:	906296-17 1/6
Date Analyzed:	06/17/19	Data File:	061722.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.054

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-22:0.8	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001.1, F&BI 906296
Date Extracted:	06/17/19	Lab ID:	906296-18 1/6
Date Analyzed:	06/17/19	Data File:	061725.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-B-1:1.5	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001.1, F&BI 906296
Date Extracted:	06/17/19	Lab ID:	906296-19 1/6
Date Analyzed:	06/17/19	Data File:	061726.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-B-7:1	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001.1, F&BI 906296
Date Extracted:	06/17/19	Lab ID:	906296-21 1/6
Date Analyzed:	06/17/19	Data File:	061727.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-B-2:1.5	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001.1, F&BI 906296
Date Extracted:	06/17/19	Lab ID:	906296-22 1/6
Date Analyzed:	06/17/19	Data File:	061728.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.034

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-3	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001.1, F&BI 906296
Date Extracted:	06/17/19	Lab ID:	906296-23 1/6
Date Analyzed:	06/17/19	Data File:	061729.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.032

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-B-6:1	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001.1, F&BI 906296
Date Extracted:	06/17/19	Lab ID:	906296-26 1/6
Date Analyzed:	06/17/19	Data File:	061730.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-B-3:2	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001.1, F&BI 906296
Date Extracted:	06/17/19	Lab ID:	906296-27 1/6
Date Analyzed:	06/18/19	Data File:	061731.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-B-4:2	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001.1, F&BI 906296
Date Extracted:	06/17/19	Lab ID:	906296-29 1/6
Date Analyzed:	06/18/19	Data File:	061732.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.014

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-2	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001.1, F&BI 906296
Date Extracted:	06/17/19	Lab ID:	906296-32 1/6
Date Analyzed:	06/18/19	Data File:	061733.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-B-5:2	Client:	Environmental Partners
Date Received:	06/14/19	Project:	Brookdale 74001.1, F&BI 906296
Date Extracted:	06/17/19	Lab ID:	906296-33 1/6
Date Analyzed:	06/18/19	Data File:	061734.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906296
Date Extracted:	06/17/19	Lab ID:	09-1422 mb 1/6
Date Analyzed:	06/18/19	Data File:	061809.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/24/19

Date Received: 06/14/19

Project: Brookdale 74001.1, F&BI 906296

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906296-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	<0.01	68	72	45-111	6
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	<0.01	66	71	50-117	7
beta-BHC	mg/kg (ppm)	0.1	<0.01	70	71	49-109	1
delta-BHC	mg/kg (ppm)	0.1	0.031	63 b	64 b	39-114	2 b
Heptachlor	mg/kg (ppm)	0.1	<0.01	67	71	40-131	6
Aldrin	mg/kg (ppm)	0.1	<0.01	72	77	44-121	7
Heptachlor Epoxide	mg/kg (ppm)	0.1	<0.01	71	77	46-122	8
trans-Chlordane	mg/kg (ppm)	0.1	<0.01	68	71	41-129	4
cis-Chlordane	mg/kg (ppm)	0.1	0.014	73	78	44-120	7
4,4'-DDE	mg/kg (ppm)	0.1	<0.01	78	84	50-150	7
Endosulfan I	mg/kg (ppm)	0.1	<0.01	69	75	45-124	8
Dieldrin	mg/kg (ppm)	0.1	0.017	71	78	45-130	9
Endrin	mg/kg (ppm)	0.1	<0.01	78	85	50-140	9
4,4'-DDD	mg/kg (ppm)	0.1	<0.01	70	77	26-155	10
Endosulfan II	mg/kg (ppm)	0.1	<0.01	62	65	40-135	5
4,4'-DDT	mg/kg (ppm)	0.1	<0.01	74	79	50-150	7
Endrin Aldehyde	mg/kg (ppm)	0.1	<0.01	64	61	35-139	5
Methoxychlor	mg/kg (ppm)	0.1	<0.01	79	84	28-162	6
Endosulfan Sulfate	mg/kg (ppm)	0.1	<0.01	69	68	40-141	1
Endrin Ketone	mg/kg (ppm)	0.1	<0.01	77	73	41-147	5
Toxaphene	mg/kg (ppm)	4	<0.01	76	81	50-150	6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/24/19

Date Received: 06/14/19

Project: Brookdale 74001.1, F&BI 906296

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
alpha-BHC	mg/kg (ppm)	0.1	78	56-113
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	75	58-120
beta-BHC	mg/kg (ppm)	0.1	81	70-130
delta-BHC	mg/kg (ppm)	0.1	82	70-130
Heptachlor	mg/kg (ppm)	0.1	88	56-124
Aldrin	mg/kg (ppm)	0.1	83	70-130
Heptachlor Epoxide	mg/kg (ppm)	0.1	81	70-130
trans-Chlordane	mg/kg (ppm)	0.1	83	60-123
cis-Chlordane	mg/kg (ppm)	0.1	89	70-130
4,4'-DDE	mg/kg (ppm)	0.1	96	70-130
Endosulfan I	mg/kg (ppm)	0.1	81	62-124
Dieldrin	mg/kg (ppm)	0.1	85	70-130
Endrin	mg/kg (ppm)	0.1	94	56-147
4,4'-DDD	mg/kg (ppm)	0.1	88	54-137
Endosulfan II	mg/kg (ppm)	0.1	76	42-140
4,4'-DDT	mg/kg (ppm)	0.1	94	25-169
Endrin Aldehyde	mg/kg (ppm)	0.1	79	21-135
Methoxychlor	mg/kg (ppm)	0.1	94	54-154
Endosulfan Sulfate	mg/kg (ppm)	0.1	83	39-148
Endrin Ketone	mg/kg (ppm)	0.1	80	46-134
Toxaphene	mg/kg (ppm)	4	75	56-145

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

906296

SAMPLE CHAIN OF CUSTODY

ME 06-14-19

Page # 1 of 1

605

Report To Thom Marin, Betzy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email thomm@epi-wa.com
betzyw@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☐ Standard Turnaround☐ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081- Distillation	Method 8081- Full Suite	Notes
A01-4-SW-13:0.9	01	6/14/19	0756	Soil	1								X		
A01-4-SW-15:0.8	02		0801		1								X		
A01-4-SW-14:1.0	03		0810		1								X		
A01-4-B-18:0.8	04		0819		1									X	
A01-4-B-15:1.8	05		0828		1										HOLD
A01-4-B-18:1.8	06		0835		1										HOLD
A01-4-B-17:2	07		0847		1								⊗ - per RB 6/17/19 PC		HOLD
A01-4-B-17:3	08		0907		1										HOLD
A01-4-B-16:2	09		0915		1										HOLD
A01-4-B-19:2	10		0941		1									X	

Samples received at 4 of

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebeca Becerra</u>	Rebeca Becerra	EPI	6/14/19	1545
Received by: <u>Michael E. Chh</u>	Michael E. Chh	F&B Inc.	6/14/19	1546
Relinquished by:				
Received by:				

Samples received at 7 of

SAMPLE CHAIN OF CUSTODY

ME 06-14-18 Page # 2 of 805

Report To Thom Morin; Betsy Wing
 Company EPI
 Address 1180 NW Maple St, Ste 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature) Betsy Wing
 PROJECT NAME Brookdale PO # 74001-1
 REMARKS INVOICE TO EPI

TURNAROUND TIME
☐ Standard Turnaround
☒ RUSH 1 week
 Rush charges authorized by:
 SAMPLE DISPOSAL
☐ Dispose after 30 days
☒ Archive Samples
☐ Other

						ANALYSES REQUESTED											Notes
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HClD	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	metad 8081-Dieldrin	metad 8081-metad 8081-1	metad 8081-2	metad 8081-3	
A01-4-B-16:1	11	6/14/19	0841	Soil	1								X				
A01-4-B-19:3	12		0949		1												HOLD
A01-4-B-21:1.5	13		0950		1												HOLD
A01-4-B-20:1.0	14		0959		1									X			
A01-4-B-22:1.8	15		1000		1												HOLD
A01-4-B-20:2	16		1009		1												HOLD
A01-4-B-21:0.5	17		1037		1								X				
A01-4-B-22:0.8	18		1049		1								X				
A01-5-B-1:1.5	19		1211		1								X				
A01-5-B-1:2.5	20		1225		1												HOLD

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebecca Becerra</u>	Rebecca Becerra	EPI	6/14/19	1546
Received by: <u>Michael Edch</u>	Michael Edch	FeBn	↓	1546
Relinquished by:				
Received by:				

SAMPLE CHAIN OF CUSTODY

ME 06-14-18 Page # 3 of 805

Report To Thom Morin, Betsy Wing
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLES (signature) Rebecca Becerra
 PROJECT NAME Brookdale PO # 74001.1
 REMARKS INVOICE TO EPI

TURNAROUND TIME
☐ Standard Turnaround
☒ RUSH 1 week
 Rush charges authorized by:
 SAMPLE DISPOSAL
☐ Dispose after 30 days
☒ Archive Samples
☐ Other

						ANALYSES REQUESTED												
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 Diesel	Method 8081 Full Suite			Notes	
AOI-5-B-7:1	21	6/14/19	1226	soil	1								X				◆ - per BW	
AOI-5-B-2:1.5	22	↓	1241	↓	1								X				6/21/19 ME	
DUP-3	23		—		1									X				
AOI-5-B-7:2	24		1250		1													HOLD
AOI-5-B-2:2.5	25		1253		1									◆				HOLD
AOI-5-B-6:1	26		1309		1										X			
AOI-5-B-3:2	27		1311		1								X					
AOI-5-B-3:3	28		1319		1												HOLD	
AOI-5-B-4:2	29		1329		1								X					
AOI-5-B-6:2	30	↓	1338	↓	1												HOLD	

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebecca Becerra</u>	<u>Rebecca Becerra</u>	<u>EPI</u>	<u>6/14/19</u>	<u>1540</u>
Received by: <u>Michael Erdahl</u>	<u>Michael Erdahl</u>	<u>F&B</u>	<u>6</u>	<u>4</u>
Relinquished by:				
Received by:				

906296

SAMPLE CHAIN OF CUSTODY

ME 06-14-19

Page # 4 of

BOS

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St Suite 310City, State, ZIP Issaquah, WA 98027Phone 425-375-0810 Email thomm@epi-wa.com
betsy.w@epi-wa.com

SAMPLER'S (Signature)

PROJECT NAME

PO #

REMARKS

INVOICE TO

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 1 week
 Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

batsyn@epi-wa.com						ANALYSES REQUESTED											
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081 field/w	method 8081 full suite			Notes
ADI-B-4:3	31	6/14/19	1341	Soil	1								method 8081				HOLD
DUP-2	32	↓	—	↓	1								X				
ADI-5-B-5:2	33	↓	1349	↓	1								X				
ADI-5-B-5:3	34	↓	1411	↓	1												HOLD

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebecca Becerra</u>	<u>Rebecca Becerra</u>	<u>EPI</u>	<u>6/14/19</u>	<u>1546</u>
Received by: <u>[Signature]</u>	<u>Michael Eckel</u>	<u>FIRN</u>	<u>6/14/19</u>	<u>1546</u>
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 1, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 906337

Dear Mr Morin:

Included are the additional results from the testing of material submitted on June 17, 2019 from the Brookdale 74001.1, F&BI 906337 project. There are 5 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0701R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 17, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 906337 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906337 -01	AOI-5-SW-5:0.5
906337 -02	AOI-5-SW-1:1
906337 -03	AOI-5-SW-2:0.9
906337 -04	AOI-5-SW-4:1.7
906337 -05	DUP-4
906337 -06	AOI-5-SW-3:1
906337 -07	AOI-6-B-1:1.7
906337 -08	AOI-6-B-1:2.7
906337 -09	AOI-6-B-16:1.5
906337 -10	AOI-6-B-2:1.4
906337 -11	AOI-6-B-16:2.5
906337 -12	AOI-6-B-2:2.4
906337 -13	AOI-6-B-15:2
906337 -14	DUP-5
906337 -15	AOI-6-B-3:1
906337 -16	AOI-6-B-14:2.5
906337 -17	AOI-6-B-3:2
906337 -18	AOI-6-B-4:1
906337 -19	AOI-6-B-15:3
906337 -20	AOI-6-B-14:3.5
906337 -21	AOI-6-B-4:2
906337 -22	AOI-6-B-10:2
906337 -23	AOI-6-B-5:1
906337 -24	AOI-6-B-10:3
906337 -25	AOI-6-B-5:2
906337 -26	AOI-6-B-11:2.2
906337 -27	AOI-6-B-6:3
906337 -28	AOI-6-B-11:3.2
906337 -29	AOI-6-B-6:4
906337 -30	AOI-6-B-12:2.5
906337 -31	AOI-6-B-7:3
906337 -32	AOI-6-B-12:3.5
906337 -33	AOI-6-B-13:3
906337 -34	AOI-6-B-7:4
906337 -35	AOI-6-B-13:4
906337 -36	AOI-6-B-8:3
906337 -37	AOI-6-B-9:3
906337 -38	AOI-6-B-8:4
906337 -39	AOI-6-B-9:4
906337 -40	DUP-6
906337 -41	DUP-7
906337 -42	DUP-8

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-B-15:3	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/26/19	Lab ID:	906337-19 1/6
Date Analyzed:	06/28/19	Data File:	062761.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.48

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/26/19	Lab ID:	09-1535 mb 1/6
Date Analyzed:	06/27/19	Data File:	062715.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/01/19

Date Received: 06/17/19

Project: Brookdale 74001.1, F&BI 906337

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906495-37 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	88	88	45-130	0

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

ME 06/17/19

Page # 1 of 5

Report To Thom Morine, Betsy Wing
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone 425-395-0000 Email thomm@epi-wa.com
betsyn@epi-wa.com

SAMPLERS (signature) <u>Rebecca Becerra</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS	INVOICE TO <u>EPI Ichijo USA</u>

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>1 week</u> Rush charges authorized by:
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081-Dieldrin	Method 8081-Endrin	Method 8081-Full Suite	
AOI-5-SW-5:0.5	01	6/17/19	0907	Soil	1								X	X		
AOI-5-SW-1:1	02		0912		1								X	X		
AOI-5-SW-2:0.9	03		0920		1								X	X		
AOI-5-SW-4:1.7	04		0923		1								X	X		
DUP-4	05		—		1								X	X		
AOI-5-SW-3:1	06		0930		1								X	X		
AOI-6-B-1:1.7	07		1105		1								X	X		
AOI-6-B-1:2.7	08		1120		1								X	X		
AOI-6-B-16:1.5	09		1125		1								X	X		
AOI-6-B-2:1.4	10		1135		1								X	X		

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebecca Becerra</u>	<u>Rebecca Becerra</u>	<u>EPI</u>	<u>6/17/19</u>	<u>1502</u>
Received by: <u>[Signature]</u>	<u>Michael E. Cui</u>	<u>FLA</u>	<u>1</u>	<u>1</u>
Relinquished by:				
Received by:				

Samples received at 4 °C

906337

SAMPLE CHAIN OF CUSTODY

ME 06/17/19

BOY

Page # 2 of 5

Send Report To Thom Marine, Betsy WingCompany Environmental Partners, IncAddress 1180 NW Maple St Suite 310City, State, ZIP Issaquah, WA 98027Phone # (425) 395-0010 Fax # (425) 395-0011

SAMPLERS (signature)

Rebecca Becerra

PROJECT NAME/NO.

Brookdale

PO#

74001.1

REMARKS

Invoice to
Ichijo USA

TURNAROUND TIME

☐ Standard (2 Weeks)☒ RUSH 1 week

Rush charges authorized by

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructionsArchive

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED											Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Method 8081 - Volatile 2081 - Fuel suite					
A0I-6-B-16: 2.5	11	6/17/19	1137	Soil	1												Hold
A0I-6-B-2: 2.4	12		1147		1												Hold
A0I-6-B-15: 2	13		1155		1							X					
A0I-6-B-15: 2 DUP-5	14				1							X					
A0I-6-B-3: 1	15		1159		1							X					
A0I-6-B-14: 2.5	16		1210		1							X					
A0I-6-B-3: 2	17		1215		1							X					Hold
A0I-6-B-4: 1	18		1241		1							X					
A0I-6-B-15: 3	19		1243		1							X					Hold
A0I-6-B-14: 3.5	20		1245		1							X					Hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

FORMS\COC\COC.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebecca Becerra</u>	<u>Rebecca Becerra</u>	<u>EPI</u>	<u>6/17/19</u>	<u>1503</u>
Received by: <u>[Signature]</u>	<u>Michael Enchell</u>	<u>FRM</u>	<u>6/17/19</u>	<u>1</u>
Relinquished by:				
Received by:		Samples received at	<u>4 °C</u>	

per BW
6/17/19
ME

906337

SAMPLE CHAIN OF CUSTODY

NE 06/07/19

Page # 3 of 5

Report To Thom Morine, Betsy Wing

Company EPI

Address 1180 NW Maple St, Suite 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0118 Email thomm@epi-wa.com

betsyw@epi-wa.com

SAMPLERS (signature)

Rebecca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO
Ichijo USA

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 1 week
 Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	SOX- Diethyl	SOX- Full suite			
AOI-6-B-4:2	21	6/17/19	1253	soil	1												Hold
AOI-6-B-10:2	22		1257		1								X				
AOI-6-B-5:1	23		1302		1								X				
AOI-6-B-10:3	24		1307		1												Hold
AOI-6-B-5:2	25		1317		1												Hold
AOI-6-B-11:2.2	26		1331		1								X				
AOI-6-B-6:3	27		1334		1								X				
AOI-6-B-11:3.2	28		1336		1												Hold
AOI-6-B-6:4	29		1341		1												Hold
AOI-6-B-12:2.5	30	↓	1351	↓	1								X				

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Rebecca Becerra	Rebecca Becerra	EPI	6/17/19	1504
Received by: [Signature]	Michael Ench	Furn	↓	↓
Relinquished by:				
Received by:		Samples received at	4 °C	

K1c
↓

906337

SAMPLE CHAIN OF CUSTODY

ME 06/07/19

804

Report To Tom Morin / Betsy Wing
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone 425-285-0000 Email thom@epi-wa.com

SAMPLERS (signature)

Rebeca Becerra

Page #

4

of

5

TURNAROUND TIME

☒ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo USA

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	8081- Vetrolin	80-81 full suite		
A0I-6-B-7:3	31	6/17/19	1355	Soil	1								X			
A0I-6-B-12:3.5	32		1359		1											Hold
A0I-6-B-13:3	33		1409		1								X			
A0I-6-B-7:4	34		1412		1											Hold
A0I-6-B-13:4	35		1413		1											Hold
A0I-6-B-8:3	36		1420		1								X			
A0I-6-B-9:3	37		1424		1								RB 4/17/19	X		
A0I-6-B-8:4	38		1430		1											Hold
A0I-6-B-9:4	39		1431		1											Hold
DUP-6	40		—		1								X			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebeca Becerra</u>	<u>Rebeca Becerra</u>	<u>EPI</u>	<u>6/17/19</u>	<u>1710</u>
Received by: <u>[Signature]</u>	<u>Michael Enchi</u>	<u>FCR</u>	<u>6</u>	<u>1710</u>
Relinquished by:				
Received by:		Samples received at <u>4</u> °C		

906337

SAMPLE CHAIN OF CUSTODY

ME 06/17/19

B04

Report To Thou Main / B. Wing
 Company 1180 NW Maple St, Suite 310
 Address Issaquah, WA 98027
 City, State, ZIP 1
 Phone 425-395-2110 Email thou@epi-inc.com

SAMPLERS (signature)

Rebecca Becerra

Page # 5 of 5

TURNAROUND TIME

PROJECT NAME

74001-Brookdale

PO #

74001.1

Standard Turnaround

RUSH 1 week

Rush charges authorized by:

REMARKS

INVOICE TO

Ichijo USA

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	8021B Diesel	8021B Gasoline	8021B TPH	8021B SVOCs	
DUP-7	41	6/16/19	—	soil	1									X			
DUP-8	42	6/16/19	—	soil	1									X			

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebecca Becerra</u>	<u>Rebecca Becerra</u>	<u>EPI</u>	<u>6/17/19</u>	<u>1710</u>
Received by: <u>[Signature]</u>	<u>Michael [Signature]</u>	<u>PER</u>	<u>↓</u>	<u>↓</u>
Relinquished by:				
Received by:				

Samples received at 4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

June 26, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 906337

Dear Mr Morin:

Included are the results from the testing of material submitted on June 17, 2019 from the Brookdale 74001.1, F&BI 906337 project. There are 35 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0626R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 17, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 906337 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906337 -01	AOI-5-SW-5:0.5
906337 -02	AOI-5-SW-1:1
906337 -03	AOI-5-SW-2:0.9
906337 -04	AOI-5-SW-4:1.7
906337 -05	DUP-4
906337 -06	AOI-5-SW-3:1
906337 -07	AOI-6-B-1:1.7
906337 -08	AOI-6-B-1:2.7
906337 -09	AOI-6-B-16:1.5
906337 -10	AOI-6-B-2:1.4
906337 -11	AOI-6-B-16:2.5
906337 -12	AOI-6-B-2:2.4
906337 -13	AOI-6-B-15:2
906337 -14	DUP-5
906337 -15	AOI-6-B-3:1
906337 -16	AOI-6-B-14:2.5
906337 -17	AOI-6-B-3:2
906337 -18	AOI-6-B-4:1
906337 -19	AOI-6-B-15:3
906337 -20	AOI-6-B-14:3.5
906337 -21	AOI-6-B-4:2
906337 -22	AOI-6-B-10:2
906337 -23	AOI-6-B-5:1
906337 -24	AOI-6-B-10:3
906337 -25	AOI-6-B-5:2
906337 -26	AOI-6-B-11:2.2
906337 -27	AOI-6-B-6:3
906337 -28	AOI-6-B-11:3.2
906337 -29	AOI-6-B-6:4
906337 -30	AOI-6-B-12:2.5
906337 -31	AOI-6-B-7:3
906337 -32	AOI-6-B-12:3.5
906337 -33	AOI-6-B-13:3
906337 -34	AOI-6-B-7:4
906337 -35	AOI-6-B-13:4
906337 -36	AOI-6-B-8:3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

906337 -37	AOI-6-B-9:3
906337 -38	AOI-6-B-8:4
906337 -39	AOI-6-B-9:4
906337 -40	DUP-6
906337 -41	DUP-7
906337 -42	DUP-8

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-SW-5:0.5	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-01 1/6
Date Analyzed:	06/19/19	Data File:	061916.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-SW-1:1	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-02 1/60
Date Analyzed:	06/22/19	Data File:	062209.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77 d	50	150
DBC	108 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-SW-2:0.9	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-03 1/60
Date Analyzed:	06/22/19	Data File:	062210.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81 d	50	150
DBC	110 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-SW-4:1.7	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-04 1/60
Date Analyzed:	06/22/19	Data File:	062211.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79 d	50	150
DBC	104 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.94

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-4	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-05 1/60
Date Analyzed:	06/22/19	Data File:	062212.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78 d	50	150
DBC	108 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.84

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-SW-3:1	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-06 1/6
Date Analyzed:	06/19/19	Data File:	061928.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.022

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-B-1:1.7	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-07 1/6
Date Analyzed:	06/19/19	Data File:	061929.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.015

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID: AOI-6-B-16:1.5	Client: Environmental Partners
Date Received: 06/17/19	Project: Brookdale 74001.1, F&BI 906337
Date Extracted: 06/18/19	Lab ID: 906337-09 1/6
Date Analyzed: 06/19/19	Data File: 061913.D
Matrix: Soil	Instrument: GC7
Units: mg/kg (ppm) Dry Weight	Operator: MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-B-2:1.4	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-10 1/6
Date Analyzed:	06/19/19	Data File:	061914.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.03
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-B-15:2	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-13 1/6
Date Analyzed:	06/19/19	Data File:	061930.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.31

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-5	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-14 1/6
Date Analyzed:	06/19/19	Data File:	061931.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.20

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-B-3:1	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-15 1/6
Date Analyzed:	06/19/19	Data File:	061932.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.023

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-B-14:2.5	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-16 1/6
Date Analyzed:	06/19/19	Data File:	061915.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.03
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-B-4:1	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-18 1/6
Date Analyzed:	06/19/19	Data File:	061933.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.033

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-B-10:2	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-22 1/6
Date Analyzed:	06/19/19	Data File:	061934.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-B-5:1	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-23 1/6
Date Analyzed:	06/19/19	Data File:	061935.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-B-11:2.2	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-26 1/6
Date Analyzed:	06/19/19	Data File:	061936.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.034

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-B-6:3	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-27 1/6
Date Analyzed:	06/19/19	Data File:	061937.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.012

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-B-12:2.5	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-30 1/6
Date Analyzed:	06/19/19	Data File:	061940.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.014

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-B-7:3	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-31 1/6
Date Analyzed:	06/19/19	Data File:	061917.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-B-13:3	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-33 1/6
Date Analyzed:	06/19/19	Data File:	061941.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-B-8:3	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-36 1/6
Date Analyzed:	06/19/19	Data File:	061942.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.013

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-B-9:3	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-37 1/6
Date Analyzed:	06/18/19	Data File:	061822.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-6	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-40 1/6
Date Analyzed:	06/19/19	Data File:	061943.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-7	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-41 1/6
Date Analyzed:	06/19/19	Data File:	061944.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.018

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-8	Client:	Environmental Partners
Date Received:	06/17/19	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	906337-42 1/6
Date Analyzed:	06/19/19	Data File:	061945.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.022

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	09-1442 mb 1/6
Date Analyzed:	06/18/19	Data File:	061815.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	90	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906337
Date Extracted:	06/18/19	Lab ID:	09-1443 mb 1/6
Date Analyzed:	06/19/19	Data File:	061907.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/26/19

Date Received: 06/17/19

Project: Brookdale 74001.1, F&BI 906337

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR ORGANOCHLORINE PESTICIDES BY EPA METHOD 8081B

Laboratory Code: 906337-31 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	<0.01	77	80	45-111	4
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	<0.01	79	83	50-117	5
beta-BHC	mg/kg (ppm)	0.1	<0.01	83	84	49-109	1
delta-BHC	mg/kg (ppm)	0.1	<0.01	89	90	39-114	1
Heptachlor	mg/kg (ppm)	0.1	<0.01	79	86	40-131	8
Aldrin	mg/kg (ppm)	0.1	<0.01	83	85	44-121	2
Heptachlor Epoxide	mg/kg (ppm)	0.1	<0.01	83	85	46-122	2
trans-Chlordane	mg/kg (ppm)	0.1	<0.01	84	85	41-129	1
cis-Chlordane	mg/kg (ppm)	0.1	<0.01	90	90	44-120	0
4,4'-DDE	mg/kg (ppm)	0.1	<0.01	90	89	50-150	1
Endosulfan I	mg/kg (ppm)	0.1	<0.01	81	82	45-124	1
Dieldrin	mg/kg (ppm)	0.1	<0.01	102	100	45-130	2
Endrin	mg/kg (ppm)	0.1	<0.01	96	97	50-140	1
4,4'-DDD	mg/kg (ppm)	0.1	<0.01	89	89	26-155	0
Endosulfan II	mg/kg (ppm)	0.1	<0.01	77	78	40-135	1
4,4'-DDT	mg/kg (ppm)	0.1	<0.01	86	87	50-150	1
Endrin Aldehyde	mg/kg (ppm)	0.1	<0.01	77	79	35-139	3
Methoxychlor	mg/kg (ppm)	0.1	<0.01	93	95	28-162	2
Endosulfan Sulfate	mg/kg (ppm)	0.1	<0.01	83	85	40-141	2
Endrin Ketone	mg/kg (ppm)	0.1	<0.01	82	88	41-147	7
Toxaphene	mg/kg (ppm)	4	<0.01	82	78	50-150	5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/26/19

Date Received: 06/17/19

Project: Brookdale 74001.1, F&BI 906337

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR ORGANOCHLORINE PESTICIDES BY EPA METHOD 8081B

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
alpha-BHC	mg/kg (ppm)	0.1	82	56-113
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	81	58-120
beta-BHC	mg/kg (ppm)	0.1	87	70-130
delta-BHC	mg/kg (ppm)	0.1	87	70-130
Heptachlor	mg/kg (ppm)	0.1	88	56-124
Aldrin	mg/kg (ppm)	0.1	87	70-130
Heptachlor Epoxide	mg/kg (ppm)	0.1	86	70-130
trans-Chlordane	mg/kg (ppm)	0.1	88	60-123
cis-Chlordane	mg/kg (ppm)	0.1	96	70-130
4,4'-DDE	mg/kg (ppm)	0.1	97	70-130
Endosulfan I	mg/kg (ppm)	0.1	86	62-124
Dieldrin	mg/kg (ppm)	0.1	88	70-130
Endrin	mg/kg (ppm)	0.1	100	56-147
4,4'-DDD	mg/kg (ppm)	0.1	93	54-137
Endosulfan II	mg/kg (ppm)	0.1	81	42-140
4,4'-DDT	mg/kg (ppm)	0.1	91	25-169
Endrin Aldehyde	mg/kg (ppm)	0.1	74	21-135
Methoxychlor	mg/kg (ppm)	0.1	97	54-154
Endosulfan Sulfate	mg/kg (ppm)	0.1	87	39-148
Endrin Ketone	mg/kg (ppm)	0.1	85	46-134
Toxaphene	mg/kg (ppm)	4	83	56-145

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/26/19

Date Received: 06/17/19

Project: Brookdale 74001.1, F&BI 906337

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR ORGANOCHLORINE PESTICIDES BY EPA METHOD 8081B

Laboratory Code: 906337-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	<0.01	77	79	45-111	3
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	<0.01	75	78	50-117	4
beta-BHC	mg/kg (ppm)	0.1	<0.01	79	82	49-109	4
delta-BHC	mg/kg (ppm)	0.1	<0.01	78	80	39-114	3
Heptachlor	mg/kg (ppm)	0.1	<0.01	80	85	40-131	6
Aldrin	mg/kg (ppm)	0.1	<0.01	82	83	44-121	1
Heptachlor Epoxide	mg/kg (ppm)	0.1	<0.01	81	83	46-122	2
trans-Chlordane	mg/kg (ppm)	0.1	<0.01	78	79	41-129	1
cis-Chlordane	mg/kg (ppm)	0.1	<0.01	86	87	44-120	1
4,4'-DDE	mg/kg (ppm)	0.1	<0.01	87	87	50-150	0
Endosulfan I	mg/kg (ppm)	0.1	<0.01	79	80	45-124	1
Dieldrin	mg/kg (ppm)	0.1	<0.01	82	83	45-130	1
Endrin	mg/kg (ppm)	0.1	<0.01	95	96	50-140	1
4,4'-DDD	mg/kg (ppm)	0.1	<0.01	84	86	26-155	2
Endosulfan II	mg/kg (ppm)	0.1	<0.01	73	74	40-135	1
4,4'-DDT	mg/kg (ppm)	0.1	<0.01	83	82	50-150	1
Endrin Aldehyde	mg/kg (ppm)	0.1	<0.01	72	72	35-139	0
Methoxychlor	mg/kg (ppm)	0.1	<0.01	93	93	28-162	0
Endosulfan Sulfate	mg/kg (ppm)	0.1	<0.01	81	82	40-141	1
Endrin Ketone	mg/kg (ppm)	0.1	<0.01	76	78	41-147	3
Toxaphene	mg/kg (ppm)	4	<0.01	79	75	50-150	5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/26/19

Date Received: 06/17/19

Project: Brookdale 74001.1, F&BI 906337

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR ORGANOCHLORINE PESTICIDES BY EPA METHOD 8081B

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
alpha-BHC	mg/kg (ppm)	0.1	79	56-113
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	77	58-120
beta-BHC	mg/kg (ppm)	0.1	83	70-130
delta-BHC	mg/kg (ppm)	0.1	88	70-130
Heptachlor	mg/kg (ppm)	0.1	83	56-124
Aldrin	mg/kg (ppm)	0.1	86	70-130
Heptachlor Epoxide	mg/kg (ppm)	0.1	86	70-130
trans-Chlordane	mg/kg (ppm)	0.1	85	60-123
cis-Chlordane	mg/kg (ppm)	0.1	93	70-130
4,4'-DDE	mg/kg (ppm)	0.1	96	70-130
Endosulfan I	mg/kg (ppm)	0.1	84	62-124
Dieldrin	mg/kg (ppm)	0.1	88	70-130
Endrin	mg/kg (ppm)	0.1	102	56-147
4,4'-DDD	mg/kg (ppm)	0.1	90	54-137
Endosulfan II	mg/kg (ppm)	0.1	79	42-140
4,4'-DDT	mg/kg (ppm)	0.1	91	25-169
Endrin Aldehyde	mg/kg (ppm)	0.1	77	21-135
Methoxychlor	mg/kg (ppm)	0.1	98	54-154
Endosulfan Sulfate	mg/kg (ppm)	0.1	86	39-148
Endrin Ketone	mg/kg (ppm)	0.1	85	46-134
Toxaphene	mg/kg (ppm)	4	74	56-145

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

ME 06/17/19

Page # 1 of 5

Report To Thom Morine, Betsy Wing
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone 425-395-0000 Email thomm@epi-wa.com
betsyn@epi-wa.com

SAMPLERS (signature) <u>Rebecca Becerra</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS	INVOICE TO <u>EPI Ichijo USA</u>

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround	<u>1 week</u>
<input type="checkbox"/> RUSH	
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	
<input checked="" type="checkbox"/> Archive Samples	
<input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081-Dieldrin	Method 8081-Endrin	Method 8081-Full Suite	
AOI-5-SW-5:0.5	01	6/17/19	0907	Soil	1								X	X		
AOI-5-SW-1:1	02		0912		1								X	X		
AOI-5-SW-2:0.9	03		0920		1								X	X		
AOI-5-SW-4:1.7	04		0923		1								X	X		
DUP-4	05		—		1								X	X		
AOI-5-SW-3:1	06		0930		1								X	X		
AOI-6-B-1:1.7	07		1105		1								X	X		
AOI-6-B-1:2.7	08		1120		1								X	X		
AOI-6-B-1b:1.5	09		1125		1								X	X		
AOI-6-B-2:1.4	10		1135		1								X	X		

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebecca Becerra</u>	<u>Rebecca Becerra</u>	<u>EPI</u>	<u>6/17/19</u>	<u>1502</u>
Received by: <u>[Signature]</u>	<u>Michael E. Cui</u>	<u>FLAN</u>	<u>1</u>	<u>1</u>
Relinquished by:				
Received by:				

Samples received at 4 °C

906337

SAMPLE CHAIN OF CUSTODY

ME 06/17/19

BOY

Page # 2 of 5

Send Report To Thom Marine, Betsy WingCompany Environmental Partners, IncAddress 1180 NW Maple St Suite 310City, State, ZIP Issaquah, WA 98027Phone # (425) 395-0010 Fax # (425) 395-0011

SAMPLERS (signature)

Rebecca Becerra

PROJECT NAME/NO.

Brookdale

PO#

74001.1

REMARKS

Invoice to
Ichijo USA

TURNAROUND TIME

☐ Standard (2 Weeks)☒ RUSH 1 week

Rush charges authorized by

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructionsArchive

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes		
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Method 8081 - Volatile	Method 8081 - Semi-volatile	Method 8081 - Full suite				
A0I-6-B-16: 2.5	11	6/17/19	1137	Soil	1													Hold
A0I-6-B-2: 2.4	12		1147		1													Hold
A0I-6-B-15: 2	13		1155		1									X				
A0I-6-B-15: 2 DUP-5	14		—		1									X				
A0I-6-B-3: 1	15		1159		1									X				
A0I-6-B-14: 2.5	16		1210		1									X				
A0I-6-B-3: 2	17		1215		1									X				Hold
A0I-6-B-4: 1	18		1241		1									X				
A0I-6-B-15: 3	19		1243		1									X				Hold
A0I-6-B-14: 3.5	20		1245		1									X				Hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

FORMS\COC\COC.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebecca Becerra</u>	<u>Rebecca Becerra</u>	<u>EPI</u>	<u>6/17/19</u>	<u>1503</u>
Received by: <u>[Signature]</u>	<u>Michael Enchell</u>	<u>FRM</u>	<u>6/17/19</u>	<u>1</u>
Relinquished by:				
Received by:		Samples received at	<u>4 °C</u>	

per BW
6/17/19
ME

906337

SAMPLE CHAIN OF CUSTODY

NE 06/07/19

Page # 3 of 5

Report To Thom Morine, Betsy Wing

Company EPI

Address 1180 NW Maple St, Suite 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0119 Email thomm@epi-wa.com

betsyw@epi-wa.com

SAMPLERS (signature)

Rebecca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO
Ichijo USA

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 1 week
 Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

						ANALYSES REQUESTED											Notes
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	SOX- Diethyl	SOX- Full suite			
AOI-6-B-4:2	21	6/17/19	1253	soil	1												Hold
AOI-6-B-10:2	22		1257		1								X				
AOI-6-B-5:1	23		1302		1								X				
AOI-6-B-10:3	24		1307		1												Hold
AOI-6-B-5:2	25		1317		1												Hold
AOI-6-B-11:2.2	26		1331		1								X				
AOI-6-B-6:3	27		1334		1								X				
AOI-6-B-11:3.2	28		1336		1												Hold
AOI-6-B-6:4	29		1341		1												Hold
AOI-6-B-12:2.5	30	↓	1351	↓	1								X				

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Rebecca Becerra	Rebecca Becerra	EPI	6/17/19	1504
Received by: Michael Ench	Michael Ench	Furn	↓	↓
Relinquished by:				
Received by:		Samples received at	4 °C	

K1c
↓

906337

SAMPLE CHAIN OF CUSTODY

ME 06/07/19

804

Report To Tom Morin / Betsy Wing
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone 425-285-0000 Email thom@epi-wa.com

SAMPLERS (signature)

Rebeca Becerra

Page #

4

of

5

TURNAROUND TIME

☒ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo USA

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	8081- Vetrolin	80-81 full suite		
A0I-6-B-7:3	31	6/17/19	1355	Soil	1								X			
A0I-6-B-12:3.5	32		1359		1											Hold
A0I-6-B-13:3	33		1409		1								X			
A0I-6-B-7:4	34		1412		1											Hold
A0I-6-B-13:4	35		1413		1											Hold
A0I-6-B-8:3	36		1420		1								X			
A0I-6-B-9:3	37		1424		1								RB 4/17/19	X		
A0I-6-B-8:4	38		1430		1											Hold
A0I-6-B-9:4	39		1431		1											Hold
DUP-6	40		—		1								X			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebeca Becerra</u>	<u>Rebeca Becerra</u>	<u>EPI</u>	<u>6/17/19</u>	<u>1710</u>
Received by: <u>[Signature]</u>	<u>Michael Enchi</u>	<u>FCR</u>	<u>6</u>	<u>1710</u>
Relinquished by:				
Received by:		Samples received at <u>4</u> °C		

906337

SAMPLE CHAIN OF CUSTODY

ME 06/17/19

B04

Report To Thou Main / B. WingCompany 1180 NW Maple St, Suite 310Address Issaquah, WA 98027City, State, ZIP 1Phone 425-395-2010 Email thoumain@epi-inc.com

SAMPLERS (signature)

Rebecca BecerraPage # 5 of 5

TURNAROUND TIME

PROJECT NAME

PO #

74001-Brookdale

74001.1

☒ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

REMARKS

INVOICE TO

Ichijo USA

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	8021B Diesel	8021B Gasoline	8021B TPH	
DUP-7	41	6/16/19	—	soil	1								X			
DUP-8	42	6/16/19	—	soil	1								X			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebecca Becerra</u>	<u>Rebecca Becerra</u>	<u>EPI</u>	<u>6/17/19</u>	<u>1710</u>
Received by: <u>[Signature]</u>	<u>Michael [Signature]</u>	<u>PER</u>	<u>↓</u>	<u>↓</u>
Relinquished by:				
Received by:				
Samples received at			<u>4</u>	

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 9, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 906363

Dear Mr Morin:

Included are the additional results from the testing of material submitted on June 18, 2019 from the Brookdale 74001.1, F&BI 906363 project. There are 10 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0709R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 18, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 906363 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906363 -01	AOI-6-SW-1:1
906363 -02	AOI-6-SW-7:1
906363 -03	AOI-6-SW-6:2
906363 -04	AOI-6-SW-2:0.8
906363 -05	AOI-6-SW-5:1
906363 -06	AOI-6-SW-3:0.9
906363 -07	AOI-6-SW-4:1.7
906363 -08	DUP-9
906363 -09	AOI-8-SW-1:1
906363 -10	AOI-8-SW-6:1
906363 -11	AOI-8-SW-2:1.0
906363 -12	AOI-8-SW-5:0.8
906363 -13	AOI-8-SW-3:0.8
906363 -14	AOI-8-SW-4:0.11
906363 -15	AOI-8-B-1:1.7
906363 -16	AOI-8-B-11:1.0
906363 -17	AOI-8-B-1:2.7
906363 -18	AOI-8-B-11:2.0
906363 -19	AOI-8-B-10:1.0
906363 -20	AOI-8-B-2:1.0
906363 -21	AOI-8-B-2:2
906363 -22	AOI-8-B-10:2
906363 -23	DUP-10
906363 -24	DUP-11
906363 -25	DUP-12
906363 -26	DUP-13
906363 -27	AOI-8-B-3:1.5
906363 -28	AOI-8-B-9:1
906363 -29	AOI-8-B-3:2.5
906363 -30	AOI-8-B-4:1
906363 -31	AOI-8-B-9:2
906363 -32	AOI-8-B-4:2
906363 -33	AOI-8-B-5:1.5
906363 -34	AOI-8-B-8:1.5
906363 -35	AOI-8-B-5:2.5
906363 -36	AOI-8-B-8:2.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906363 -37	AOI-8-B-6:1.5
906363 -38	AOI-8-B-7:1.5
906363 -39	AOI-8-B-6:2.5
906363 -40	AOI-8-B-7:2.5

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-1:2.7	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/28/19	Lab ID:	906363-17 1/6
Date Analyzed:	06/29/19	Data File:	062937.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.17

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-2:2	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/28/19	Lab ID:	906363-21 1/6
Date Analyzed:	06/29/19	Data File:	062938.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.16

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-10:2	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/28/19	Lab ID:	906363-22 1/6
Date Analyzed:	06/29/19	Data File:	062939.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.032

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-6:2.5	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/28/19	Lab ID:	906363-39 1/6
Date Analyzed:	06/29/19	Data File:	062940.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.067

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-7:2.5	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/28/19	Lab ID:	906363-40 1/60
Date Analyzed:	07/04/19	Data File:	070357.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74 d	50	150
DBC	93 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/28/19	Lab ID:	09-1543 mb 1/6
Date Analyzed:	06/28/19	Data File:	062830.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/09/19

Date Received: 06/18/19

Project: Brookdale 74001.1, F&BI 906363

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906544-25 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.27	55 b	56 b	45-130	2 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	97	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

906363

SAMPLE CHAIN OF CUSTODY

ME 06-18-19 1 of 404

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

Rebeca BecerraPage # 1 of 1

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 1 week

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo
USA

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081- Pieldrin	Method 8081- Full Suite	Notes
AOI-6-SW-1:1	01	6/18/19	0856	Soil	1								X		per BW
AOI-6-SW-7:1	02		0900		1								X		6/26/19 ME
AOI-6-SW-6:2	03		0905		1								X		
AOI-6-SW-2:0.8	04		0906		1								X		
AOI-6-SW-5:1	05		0913		1								X		
AOI-6-SW-3:0.9	06		0915		1								X		
AOI-6-SW-4:1.7	07		0924		1								X		
DUP-9	08		—		1								X		
AOI-8-SW-1:1	09		1005		1								X		Samples received at 3 °C
AOI-8-SW-6:1	10		1007		1								X		

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Relinquished by:

Rebeca Becerra

PRINT NAME

Rebeca Becerra

COMPANY

EPI

DATE

6/18/19

TIME

1700

Received by:

[Signature]Michael EchliF 012LL

Relinquished by:

Received by:

906363

SAMPLE CHAIN OF CUSTODY ME 06-18-19

Page # 2 of 4 Coy

Report To Thom Morin; Betsy Wing

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email thomm@epi-wa.com

betsyw@epi-wa.com

SAMPLERS (signature)

Rebecca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO
Ichijo USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

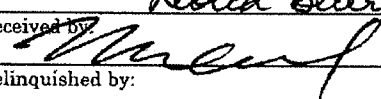
						ANALYSES REQUESTED												
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081 - Diesel	method 8081 - Full Suite			Notes	
AOI-8-SW-2:1.0	11	6/18/19	1010	Soil	1								X					
AOI-8-SW-5:0.8	12	↓	1012	↓	1								X					
AOI-8-SW-3:0.8	13		1016		1								X					
AOI-8-SW-4:0.11	14		1017		1								X					
AOI-8-B-1:1.7	15		1109		1								X					
AOI-8-B-11:1.0	16		1110		1								X					
AOI-8-B-1:2.7	17		1119		1									◆				HOLD
AOI-8-B-11:2.0	18		1124		1													HOLD
AOI-8-B-10:1.0	19		1130		1										X			
AOI-8-B-2:1.0	20		↓		1134	↓	1								X			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Rebecca Becerra	Rebecca Becerra	EPI	6/18/19	1700
Received by: 	Michael Erchul	FER	↓	↓
Relinquished by:				
Received by:		Samples received at 3°C		

906363

SAMPLE CHAIN OF CUSTODY

ME-06-18-19 3 of 4 copy

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St. Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0610 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

Rebeca BecerraPage # 3 of 4

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo
USA

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081- Prelim	method 8081- Full Suite	Notes
AOI-8-B-2:2	21	6/18/19	1136	Soil	1								◆		HOLD
AOI-8-B-10:2	22		1140		1								◆		HOLD
DUP-10	23		—		1									X	
DUP-11	24		—		1								X		
DUP-12	25		—		1								X		
DUP-13	26		—		1									X	
AOI-8-B-3:1.5	27		1146		1								X		
AOI-8-B-9:1	28		1147		1								X		
AOI-8-B-3:2.5	29		1149		1										HOLD
AOI-8-B-4:1	30	↓	1159	↓	1									X	

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebeca Becerra</u>	<u>Rebeca Becerra</u>	<u>EPI</u>	<u>6/18/19</u>	<u>1700</u>
Received by: <u>[Signature]</u>	<u>Michael Erchly</u>	<u>F&B</u>	<u>↓</u>	<u>1700</u>
Relinquished by:				
Received by:		Samples received at <u>3⁰⁰</u>		

906363

SAMPLE CHAIN OF CUSTODY

ME 06-18-19

Page #

4

of

4 copy

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0900 Email thomm@epi-wa.combetsyw@epi-wa.com

SAMPLERS (signature)

Rebecca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo
USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8061-Dielectric	Method 8081-Full Suite		
AOI-8-B-9:2	31	6/18/19	1202	Soil	1											HOLD
AOI-8-B-4:2	32		1206		1											HOLD
AOI-8-B-5:1.5	33		1233		1								X			
AOI-8-B-8:1.5	34		1235		1								X			
AOI-8-B-5:2.5	35		1239		1											HOLD
AOI-8-B-8:2.5	36		1246		1											HOLD
AOI-8-B-6:1.5	37		1254		1								X			
AOI-8-B-7:1.5	38		1255		1								X			
AOI-8-B-6:2.5	39		1256		1								◆			HOLD
AOI-8-B-7:2.5	40	✓	1308	✓	1								◆			HOLD

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Rebecca BecerraRebeca BecerraEPI6/18/19700

Received by:

[Signature]Michael L. EnghF&B↓↓

Relinquished by:

Received by:

Samples received at 3°C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

June 27, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 906363

Dear Mr Morin:

Included are the results from the testing of material submitted on June 18, 2019 from the Brookdale 74001.1, F&BI 906363 project. There are 37 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0627R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 18, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 906363 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906363 -01	AOI-6-SW-1:1
906363 -02	AOI-6-SW-7:1
906363 -03	AOI-6-SW-6:2
906363 -04	AOI-6-SW-2:0.8
906363 -05	AOI-6-SW-5:1
906363 -06	AOI-6-SW-3:0.9
906363 -07	AOI-6-SW-4:1.7
906363 -08	DUP-9
906363 -09	AOI-8-SW-1:1
906363 -10	AOI-8-SW-6:1
906363 -11	AOI-8-SW-2:1.0
906363 -12	AOI-8-SW-5:0.8
906363 -13	AOI-8-SW-3:0.8
906363 -14	AOI-8-SW-4:0.11
906363 -15	AOI-8-B-1:1.7
906363 -16	AOI-8-B-11:1.0
906363 -17	AOI-8-B-1:2.7
906363 -18	AOI-8-B-11:2.0
906363 -19	AOI-8-B-10:1.0
906363 -20	AOI-8-B-2:1.0
906363 -21	AOI-8-B-2:2
906363 -22	AOI-8-B-10:2
906363 -23	DUP-10
906363 -24	DUP-11
906363 -25	DUP-12
906363 -26	DUP-13
906363 -27	AOI-8-B-3:1.5
906363 -28	AOI-8-B-9:1
906363 -29	AOI-8-B-3:2.5
906363 -30	AOI-8-B-4:1
906363 -31	AOI-8-B-9:2
906363 -32	AOI-8-B-4:2
906363 -33	AOI-8-B-5:1.5
906363 -34	AOI-8-B-8:1.5
906363 -35	AOI-8-B-5:2.5
906363 -36	AOI-8-B-8:2.5
906363 -37	AOI-8-B-6:1.5
906363 -38	AOI-8-B-7:1.5
906363 -39	AOI-8-B-6:2.5
906363 -40	AOI-8-B-7:2.5

The 8081B calibration standard failed the acceptance criteria for 4,4'-DDT. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-SW-1:1	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-01 1/6
Date Analyzed:	06/20/19	Data File:	061948.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-SW-7:1	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-02 1/6
Date Analyzed:	06/20/19	Data File:	061949.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-SW-6:2	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-03 1/6
Date Analyzed:	06/20/19	Data File:	061950.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-SW-2:0.8	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-04 1/6
Date Analyzed:	06/20/19	Data File:	061951.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	70	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-SW-5:1	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-05 1/6
Date Analyzed:	06/20/19	Data File:	061952.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.011

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-SW-3:0.9	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-06 1/6
Date Analyzed:	06/20/19	Data File:	061954.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	73	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-SW-4:1.7	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-07 1/6
Date Analyzed:	06/20/19	Data File:	061955.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-9	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-08 1/6
Date Analyzed:	06/20/19	Data File:	061956.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	73	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-1:1	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-09 1/6
Date Analyzed:	06/20/19	Data File:	061957.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	70	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-6:1	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-10 1/6
Date Analyzed:	06/20/19	Data File:	061958.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	68	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-2:1.0	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-11 1/6
Date Analyzed:	06/20/19	Data File:	062026.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.14

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-5:0.8	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-12 1/6
Date Analyzed:	06/20/19	Data File:	062020.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-3:0.8	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-13 1/6
Date Analyzed:	06/20/19	Data File:	062027.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.12

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-4:0.11	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-14 1/6
Date Analyzed:	06/20/19	Data File:	062028.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.28

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-1:1.7	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-15 1/6
Date Analyzed:	06/20/19	Data File:	062029.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	58	50	150
DBC	69	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.14

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-11:1.0	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-16 1/6
Date Analyzed:	06/20/19	Data File:	062030.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-10:1.0	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-19 1/6
Date Analyzed:	06/20/19	Data File:	062031.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.099

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-2:1.0	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-20 1/6
Date Analyzed:	06/20/19	Data File:	062032.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.31

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID: DUP-10	Client: Environmental Partners
Date Received: 06/18/19	Project: Brookdale 74001.1, F&BI 906363
Date Extracted: 06/19/19	Lab ID: 906363-23 1/6
Date Analyzed: 06/20/19	Data File: 062021.D
Matrix: Soil	Instrument: GC7
Units: mg/kg (ppm) Dry Weight	Operator: IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	55	50	150
DBC	67	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.19
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-11	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-24 1/6
Date Analyzed:	06/20/19	Data File:	062033.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.13

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-12	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-25 1/6
Date Analyzed:	06/20/19	Data File:	062034.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-13	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-26 1/6
Date Analyzed:	06/20/19	Data File:	062022.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	1.2 ve
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-13	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-26 1/60
Date Analyzed:	06/22/19	Data File:	062207.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81 d	50	150
DBC	103 d	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.1
gamma-BHC (Lindane)	<0.1
beta-BHC	<0.1
delta-BHC	<0.1
Heptachlor	<0.1
Aldrin	<0.1
Heptachlor Epoxide	<0.1
trans-Chlordane	<0.1
cis-Chlordane	<0.1
4,4'-DDE	<0.1
Endosulfan I	<0.1
Dieldrin	1.4
Endrin	<0.1
4,4'-DDD	<0.1
Endosulfan II	<0.1
4,4'-DDT	<0.1
Endrin Aldehyde	<0.1
Methoxychlor	<0.1
Endosulfan Sulfate	<0.1
Endrin Ketone	<0.1
Toxaphene	<10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-3:1.5	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-27 1/6
Date Analyzed:	06/20/19	Data File:	062035.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-9:1	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-28 1/6
Date Analyzed:	06/20/19	Data File:	062036.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID: AOI-8-B-4:1	Client: Environmental Partners
Date Received: 06/18/19	Project: Brookdale 74001.1, F&BI 906363
Date Extracted: 06/19/19	Lab ID: 906363-30 1/6
Date Analyzed: 06/20/19	Data File: 062023.D
Matrix: Soil	Instrument: GC7
Units: mg/kg (ppm) Dry Weight	Operator: IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	58	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-5:1.5	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-33 1/6
Date Analyzed:	06/20/19	Data File:	062037.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	59	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-8:1.5	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-34 1/6
Date Analyzed:	06/20/19	Data File:	062038.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-6:1.5	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-37 1/6
Date Analyzed:	06/20/19	Data File:	062039.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.12

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-7:1.5	Client:	Environmental Partners
Date Received:	06/18/19	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	906363-38 1/60
Date Analyzed:	06/22/19	Data File:	062208.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72 d	50	150
DBC	96 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	09-1442 mb2 1/6
Date Analyzed:	06/20/19	Data File:	062012.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906363
Date Extracted:	06/19/19	Lab ID:	09-1450 mb 1/6
Date Analyzed:	06/20/19	Data File:	062013.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/27/19

Date Received: 06/18/19

Project: Brookdale 74001.1, F&BI 906363

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906337-31 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	102	100	45-130	2

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	88	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/27/19

Date Received: 06/18/19

Project: Brookdale 74001.1, F&BI 906363

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR ORGANOCHLORINE PESTICIDES BY EPA METHOD 8081B

Laboratory Code: 906363-12 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	<0.01	72	72	45-111	0
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	<0.01	75	76	50-117	1
beta-BHC	mg/kg (ppm)	0.1	<0.01	69	69	49-109	0
delta-BHC	mg/kg (ppm)	0.1	<0.01	71	69	39-114	3
Heptachlor	mg/kg (ppm)	0.1	<0.01	71	70	40-131	1
Aldrin	mg/kg (ppm)	0.1	<0.01	75	74	44-121	1
Heptachlor Epoxide	mg/kg (ppm)	0.1	<0.01	76	73	46-122	4
trans-Chlordane	mg/kg (ppm)	0.1	<0.01	72	72	41-129	0
cis-Chlordane	mg/kg (ppm)	0.1	<0.01	75	75	44-120	0
4,4'-DDE	mg/kg (ppm)	0.1	<0.01	71	70	50-150	1
Endosulfan I	mg/kg (ppm)	0.1	<0.01	70	70	45-124	0
Dieldrin	mg/kg (ppm)	0.1	0.086	31 b	53 b	45-130	52 b
Endrin	mg/kg (ppm)	0.1	<0.01	89	85	50-140	5
4,4'-DDD	mg/kg (ppm)	0.1	<0.01	75	74	26-155	1
Endosulfan II	mg/kg (ppm)	0.1	<0.01	70	66	40-135	6
4,4'-DDT	mg/kg (ppm)	0.1	<0.01	75	68	50-150	10
Endrin Aldehyde	mg/kg (ppm)	0.1	<0.01	61	55	35-139	10
Methoxychlor	mg/kg (ppm)	0.1	<0.01	91	81	28-162	12
Endosulfan Sulfate	mg/kg (ppm)	0.1	<0.01	76	74	40-141	3
Endrin Ketone	mg/kg (ppm)	0.1	<0.01	78	73	41-147	7
Toxaphene	mg/kg (ppm)	4	<1	84	86	50-150	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/27/19

Date Received: 06/18/19

Project: Brookdale 74001.1, F&BI 906363

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR ORGANOCHLORINE PESTICIDES BY EPA METHOD 8081B

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
alpha-BHC	mg/kg (ppm)	0.1	84	56-113
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	84	58-120
beta-BHC	mg/kg (ppm)	0.1	88	70-130
delta-BHC	mg/kg (ppm)	0.1	90	70-130
Heptachlor	mg/kg (ppm)	0.1	92	56-124
Aldrin	mg/kg (ppm)	0.1	91	70-130
Heptachlor Epoxide	mg/kg (ppm)	0.1	90	70-130
trans-Chlordane	mg/kg (ppm)	0.1	92	60-123
cis-Chlordane	mg/kg (ppm)	0.1	97	70-130
4,4'-DDE	mg/kg (ppm)	0.1	95	70-130
Endosulfan I	mg/kg (ppm)	0.1	89	62-124
Dieldrin	mg/kg (ppm)	0.1	93	70-130
Endrin	mg/kg (ppm)	0.1	105	56-147
4,4'-DDD	mg/kg (ppm)	0.1	95	54-137
Endosulfan II	mg/kg (ppm)	0.1	85	42-140
4,4'-DDT	mg/kg (ppm)	0.1	95	25-169
Endrin Aldehyde	mg/kg (ppm)	0.1	86	21-135
Methoxychlor	mg/kg (ppm)	0.1	101	54-154
Endosulfan Sulfate	mg/kg (ppm)	0.1	93	39-148
Endrin Ketone	mg/kg (ppm)	0.1	91	46-134
Toxaphene	mg/kg (ppm)	4	85	56-145

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

906363

SAMPLE CHAIN OF CUSTODY

ME 06-18-19 1 of 404

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

Rebeca BecerraPage # 1 of 1

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 1 week

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo
USA

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081- Pieldrin	Method 8081- Full Suite	Notes
AOI-6-SW-1:1	01	6/18/19	0856	Soil	1								X		per BW
AOI-6-SW-7:1	02		0900		1								X		6/26/19 ME
AOI-6-SW-6:2	03		0905		1								X		
AOI-6-SW-2:0.8	04		0906		1								X		
AOI-6-SW-5:1	05		0913		1								X		
AOI-6-SW-3:0.9	06		0915		1								X		
AOI-6-SW-4:1.7	07		0924		1								X		
DUP-9	08		—		1								X		
AOI-8-SW-1:1	09		1005		1								X		Samples received at 3°C
AOI-8-SW-6:1	10		1007		1								X		

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Relinquished by:

Rebeca Becerra

PRINT NAME

Rebeca Becerra

COMPANY

EPI

DATE

6/18/19

TIME

1700

Received by:

[Signature]Michael EchliF02LL

Relinquished by:

Received by:

906363

SAMPLE CHAIN OF CUSTODY ME 06-18-19

Page # 2 of 4 Coy

Report To Thom Morin; Betsy Wing

Company EPI

Address 1480 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email thomm@epi-wa.com

betsyw@epi-wa.com

SAMPLERS (signature)

Rebecca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO
Ichijo USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

						ANALYSES REQUESTED												
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081 - Diehl	method 8081 - Full Suite			Notes	
AOI-8-SW-2:1.0	11	6/18/19	1010	Soil	1								X					
AOI-8-SW-5:0.8	12		1012		1								X					
AOI-8-SW-3:0.8	13		1016		1								X					
AOI-8-SW-4:0.11	14		1017		1								X					
AOI-8-B-1:1.7	15		1109		1								X					
AOI-8-B-11:1.0	16		1110		1								X					
AOI-8-B-1:2.7	17		1119		1								◆				HOLD	
AOI-8-B-11:2.0	18		1124		1												HOLD	
AOI-8-B-10:1.0	19		1130		1								X					
AOI-8-B-2:1.0	20				1134		1							X				

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Rebecca Becerra	Rebecca Becerra	EPI	6/18/19	1700
Received by: Michael Erchul	Michael Erchul	FER	↓	↓
Relinquished by:				
Received by:		Samples received at 3°C		

906363

SAMPLE CHAIN OF CUSTODY

ME-06-18-19 3 of 4 copy

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St. Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0610 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

Rebeca BecerraPage # 3 of 4

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo
USA

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081- Prelim	method 8081- Full Suite	Notes
AOI-8-B-2:2	21	6/18/19	1136	Soil	1								◆		HOLD
AOI-8-B-10:2	22		1140		1								◆		HOLD
DUP-10	23		—		1									X	
DUP-11	24		—		1								X		
DUP-12	25		—		1								X		
DUP-13	26		—		1									X	
AOI-8-B-3:1.5	27		1146		1								X		
AOI-8-B-9:1	28		1147		1								X		
AOI-8-B-3:2.5	29		1149		1										HOLD
AOI-8-B-4:1	30	↓	1159	↓	1									X	

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebeca Becerra</u>	<u>Rebeca Becerra</u>	<u>EPI</u>	<u>6/18/19</u>	<u>1700</u>
Received by: <u>[Signature]</u>	<u>Michael Erchly</u>	<u>F&B</u>	<u>↓</u>	<u>1700</u>
Relinquished by:				
Received by:		Samples received at <u>3⁰⁰</u>		

906363

SAMPLE CHAIN OF CUSTODY

ME 06-18-19

Page #

4

of

4

copy

Report to Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0900 Email thomm@epi-wa.combetsyw@epi-wa.com

SAMPLERS (signature)

Rebecca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo
USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8061-Dielectric	Method 8081-Full suite	Notes
AOI-8-B-9:2	31	6/18/19	1202	Soil	1										HOLD
AOI-8-B-4:2	32		1206		1										HOLD
AOI-8-B-5:1.5	33		1233		1								X		
AOI-8-B-8:1.5	34		1235		1								X		
AOI-8-B-5:2.5	35		1239		1										HOLD
AOI-8-B-8:2.5	36		1246		1										HOLD
AOI-8-B-6:1.5	37		1254		1								X		
AOI-8-B-7:1.5	38		1255		1								X		
AOI-8-B-6:2.5	39		1256		1								◆		HOLD
AOI-8-B-7:2.5	40	✓	1308	✓	1								◆		HOLD

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Rebecca BecerraRebecca BecerraEPI6/18/19700

Received by:

[Signature]Michael L. EnghF&B↓↓

Relinquished by:

Received by:

Samples received at 3°C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 5, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 906393

Dear Mr Morin:

Included are the additional results from the testing of material submitted on June 19, 2019 from the Brookdale 74001.1, F&BI 906393 project. There are 7 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0705R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 19, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 906393 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906393 -01	AOI-7-SW-8:0.5
906393 -02	AOI-7-SW-1:0.5
906393 -03	AOI-7-SW-7:0.5
906393 -04	AOI-7-SW-2:0.5
906393 -05	AOI-7-SW-6:0.5
906393 -06	AOI-7-SW-3:0.8
906393 -07	AOI-7-SW-5:0.10
906393 -08	AOI-7-SW-4:0.6
906393 -09	AOI-7-B-16:1
906393 -10	AOI-7-B-1:0.9
906393 -11	AOI-7-B-16:2
906393 -12	AOI-7-B-1:1.9
906393 -13	AOI-7-B-15:1.0
906393 -14	AOI-7-B-2:0.11
906393 -15	AOI-7-B-15:2
906393 -16	AOI-7-B-2:1.11
906393 -17	AOI-7-B-3:0.9
906393 -18	AOI-7-B-3:1.9
906393 -19	AOI-7-B-14:1.0
906393 -20	AOI-7-B-4:0.10
906393 -21	AOI-7-B-14:2
906393 -22	AOI-7-B-4:1.1
906393 -23	AOI-7-B-13:1
906393 -24	AOI-7-B-5:1
906393 -25	AOI-7-B-13:2
906393 -26	AOI-7-B-5:2
906393 -27	AOI-7-B-12:0.8
906393 -28	AOI-7-B-12:1.8
906393 -29	AOI-7-B-6:1
906393 -30	AOI-7-B-11:1.5
906393 -31	AOI-7-B-11:2.5
906393 -32	AOI-7-B-6:2.0
906393 -33	DUP-14
906393 -34	DUP-15
906393 -35	DUP-16

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (Continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906393 -36	DUP-17
906393 -37	AOI-7-B-10:2.0
906393 -38	AOI-7-B-10:3.0
906393 -39	AOI-7-B-7:2
906393 -40	AOI-7-B-7:3
906393 -41	AOI-7-B-8-1.5
906393 -42	AOI-7-B-9-0.8
906393 -43	AOI-7-B-8-2.5
906393 -44	AOI-7-B-9-1.8
906393 -45	AOI-9-B-1:0.9
906393 -46	AOI-9-SW-1:0.5
906393 -47	AOI-9-B-1:1.9
906393 -48	AOI-9-SW-2:0.5

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

ZZZAnalysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-15:2	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/28/19	Lab ID:	906393-15 1/6
Date Analyzed:	06/29/19	Data File:	062935.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.35

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

ZZZAnalysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-2:1.11	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/28/19	Lab ID:	906393-16 1/6
Date Analyzed:	06/29/19	Data File:	062936.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.14

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/28/19	Lab ID:	09-1551 mb 1/6
Date Analyzed:	06/29/19	Data File:	062912.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	106	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/05/19

Date Received: 06/19/19

Project: Brookdale 74001.1, F&BI 906393

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906520-02 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	86	90	45-130	5

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	104	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

906393

SAMPLE CHAIN OF CUSTODY

ME 06/19/19 COY 1 of 5

Report to Thom Morin; Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

Rebeca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo
USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081- Dieldrin	method 8081- Full Suite	Notes
AOI-7-SW-8:0.5	01	6/19/19	0841	Soil	1								X		
AOI-7-SW-1:0.5	02		0845		1									X	
AOI-7-SW-7:0.5	03		0846		1								X		
AOI-7-SW-2:0.5	04		0849		1								X		
AOI-7-SW-6:0.5	05		0853		1								X		
AOI-7-SW-3:0.8	06		0855		1								X		
AOI-7-SW-5:0.10	07		0859		1								X		
AOI-7-SW-4:0.6	08		0901		1								X		
AOI-7-B-16:1	09		0934		1								X		
AOI-7-B-1:0.9	10		0935		1								X		

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebeca Becerra</u>	<u>Rebeca Becerra</u>	<u>EPI</u>	<u>6/19/19</u>	<u>0700</u>
Received by: <u>[Signature]</u>	<u>Michael Erdli</u>	<u>F&B</u>	<u>6/19/19</u>	<u>↓</u>
Relinquished by:				
Received by:		Samples received at <u>5</u> °C		

906393

SAMPLE CHAIN OF CUSTODY

ME 06/19/19 CW4

Page # 2 of 5

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

Rebeca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo
USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

ANALYSES REQUESTED																
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 - Diesel	Method 8081 - Full Suite	Notes	
AOI-7-B-16:2	11	6/19/19	0940	Soil	1											HOLD
AOI-7-B-1:1.9	12		0945		1											HOLD
AOI-7-B-15:1.0	13		0949		1								X			
AOI-7-B-2:0.11	14		0951		1								X			
AOI-7-B-15:2	15		0953		1								◆			HOLD
AOI-7-B-2:1.11	16		0959		1								◆			HOLD
AOI-7-B-3:0.9	17		1004		1								X			
AOI-7-B-3:1.9	18		1009		1											HOLD
AOI-7-B-14:1.0	19		1013		1								X			
AOI-7-B-4:0.10	20		1016		1								X			

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebeca Becerra</u>	<u>Rebeca Becerra</u>	<u>EPI</u>	<u>6/19/19</u>	<u>8700</u>
Received by: <u>[Signature]</u>	<u>Michael Echell</u>	<u>FLRM</u>	<u>6/19/19</u>	<u>↓</u>
Relinquished by:				
Received by:		Samples received at	<u>5 °C</u>	

906393

SAMPLE CHAIN OF CUSTODY

ME 06/19/19 COY

Page # 3 of 5

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0210 Email thomm@epi-wa.combetsyw@epi-wa.com

SAMPLERS (signature)

Rebecca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo
USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8051 Diesel	method 8051 Full Suite	Notes
AOI-7-B-14:2	21	6/19/19	1020	Soil	1										HOLD
AOI-7-B-4:1.1	22		1026		1										HOLD
AOI-7-B-13:1	23		1029		1								X		
AOI-7-B-5:1	24		1035		1								X		
AOI-7-B-13:2	25		1038		1										HOLD
AOI-7-B-5:2	26		1040		1										HOLD
AOI-7-B-12:0.8	27		1050		1								X		
AOI-7-B-12:1.8	28		1058		1										HOLD
AOI-7-B-6:1	29		1059		1								X		
AOI-7-B-11:1.5	30		1112		1								X		

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebecca Becerra</u>	<u>Rebecca Becerra</u>	<u>EPI</u>	<u>6/19/19</u>	<u>1700</u>
Received by: <u>[Signature]</u>	<u>Michael Endich</u>	<u>FCB</u>	<u>L</u>	<u>1</u>
Relinquished by:				
Received by:		Samples received at <u>5</u> °C		

906393

SAMPLE CHAIN OF CUSTODY

ME 06/19/19

COY

Page # 4 of 5

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

Rebeca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO
Ichijo
USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

ANALYSES REQUESTED																		
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8061	Diethylin	method 8061	Full Suite	Notes	
AOI-7-B-11:2.5	31	6/19/19	1118	soil	1													HOLD
AOI-7-B-6:2.0	32		1121		1													HOLD
DUP-14	33		—		1										X			
DUP-15	34		—		1								X					
DUP-16	35		—		1								X					
DUP-17	36		—		1								X					
AOI-7-B-10:2.0	37		1206		1										X			
AOI-7-B-10:3.0	38		1213		1													HOLD
AOI-7-B-7:2	39		1216		1								X					
AOI-7-B-7:3	40		1224		1													HOLD

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Relinquished by:

Rebeca Becerra

Received by:

Michael Edm

Relinquished by:

Received by:

PRINT NAME

Rebeca BecerraMichael Edm

COMPANY

EPIF4Bn.

DATE

6/19/19

TIME

1760Samples received at 5 °C

906393

SAMPLE CHAIN OF CUSTODY

ME 06/19/19 004

Page # 5 of 5

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St. Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0000 Email thomm@epi-wa.combetsyw@epi-wa.com

SAMPLERS (signature)

Rebecca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo
USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081- Diethyl- Full Suite	Notes
A0I-7-B-8-1.5	41	6/19/19	1229	Soil	1								X	
A0I-7-B-9-0.8	42	↓	1230	↓	1								X	
A0I-7-B-8-2.5	43	↓	1233	↓	1									HOLD
A0I-7-B-9-1.8	44	↓	1236	↓	1									HOLD
A0I-9-B-1:0.9	45	6/19/19	1345	Soil	1								X	
A0I-9-SW-1:0.5	46	↓	1350	↓	1								X	
A0I-9-B-1:1.9	47	↓	1351	↓	1								X	HOLD
A0I-9-SW-2:0.5	48	↓	1356	↓	1								X	

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebecca Becerra</u>	<u>Rebecca Becerra</u>	<u>EPI</u>	<u>6/19/19</u>	<u>1700</u>
Received by: <u>[Signature]</u>	<u>Michael Enchill</u>	<u>FGR</u>	<u>↓</u>	<u>↓</u>
Relinquished by:				
Received by:		Samples received at	<u>5</u> °C	

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

June 27, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 906393

Dear Mr Morin:

Included are the results from the testing of material submitted on June 19, 2019 from the Brookdale 74001.1, F&BI 906393 project. There are 40 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0627R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 19, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 906393 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906393 -01	AOI-7-SW-8:0.5
906393 -02	AOI-7-SW-1:0.5
906393 -03	AOI-7-SW-7:0.5
906393 -04	AOI-7-SW-2:0.5
906393 -05	AOI-7-SW-6:0.5
906393 -06	AOI-7-SW-3:0.8
906393 -07	AOI-7-SW-5:0.10
906393 -08	AOI-7-SW-4:0.6
906393 -09	AOI-7-B-16:1
906393 -10	AOI-7-B-1:0.9
906393 -11	AOI-7-B-16:2
906393 -12	AOI-7-B-1:1.9
906393 -13	AOI-7-B-15:1.0
906393 -14	AOI-7-B-2:0.11
906393 -15	AOI-7-B-15:2
906393 -16	AOI-7-B-2:1.11
906393 -17	AOI-7-B-3:0.9
906393 -18	AOI-7-B-3:1.9
906393 -19	AOI-7-B-14:1.0
906393 -20	AOI-7-B-4:0.10
906393 -21	AOI-7-B-14:2
906393 -22	AOI-7-B-4:1.1
906393 -23	AOI-7-B-13:1
906393 -24	AOI-7-B-5:1
906393 -25	AOI-7-B-13:2
906393 -26	AOI-7-B-5:2
906393 -27	AOI-7-B-12:0.8
906393 -28	AOI-7-B-12:1.8
906393 -29	AOI-7-B-6:1
906393 -30	AOI-7-B-11:1.5
906393 -31	AOI-7-B-11:2.5
906393 -32	AOI-7-B-6:2.0
906393 -33	DUP-14
906393 -34	DUP-15
906393 -35	DUP-16

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (Continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906393 -36	DUP-17
906393 -37	AOI-7-B-10:2.0
906393 -38	AOI-7-B-10:3.0
906393 -39	AOI-7-B-7:2
906393 -40	AOI-7-B-7:3
906393 -41	AOI-7-B-8-1.5
906393 -42	AOI-7-B-9-0.8
906393 -43	AOI-7-B-8-2.5
906393 -44	AOI-7-B-9-1.8
906393 -45	AOI-9-B-1:0.9
906393 -46	AOI-9-SW-1:0.5
906393 -47	AOI-9-B-1:1.9
906393 -48	AOI-9-SW-2:0.5

should be : but FBI
matched the COC

The 8081B calibration standard failed the acceptance criteria for 4,4'-DDT. The data were flagged accordingly. In addition, the matrix spike duplicate and the associated relative percent difference failed the acceptance criteria for several compounds. The analytes were not detected therefore the data were acceptable.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-8:0.5	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-01 1/6
Date Analyzed:	06/21/19	Data File:	062112.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	59	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.22

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-1:0.5	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-02 1/6
Date Analyzed:	06/21/19	Data File:	062115.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.051
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.054
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-7:0.5	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-03 1/6
Date Analyzed:	06/21/19	Data File:	062145.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	57	20	121
DBC	80	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-2:0.5	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-04 1/6
Date Analyzed:	06/21/19	Data File:	062146.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	20	121
DBC	78	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.13

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-6:0.5	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-05 1/6
Date Analyzed:	06/21/19	Data File:	062147.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	20	121
DBC	83	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-3:0.8	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-06 1/6
Date Analyzed:	06/21/19	Data File:	062148.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	57	20	121
DBC	72	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-5:0.10	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-07 1/6
Date Analyzed:	06/21/19	Data File:	062149.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	20	121
DBC	78	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-4:0.6	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-08 1/6
Date Analyzed:	06/21/19	Data File:	062150.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	59	20	121
DBC	79	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.024

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-16:1	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-09 1/6
Date Analyzed:	06/21/19	Data File:	062151.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	20	121
DBC	88	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-1:0.9	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-10 1/6
Date Analyzed:	06/21/19	Data File:	062152.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	20	121
DBC	86	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-15:1.0	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-13 1/6
Date Analyzed:	06/21/19	Data File:	062153.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	20	121
DBC	78	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.18

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-2:0.11	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-14 1/6
Date Analyzed:	06/22/19	Data File:	062154.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	20	121
DBC	82	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.46

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-3:0.9	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-17 1/6
Date Analyzed:	06/22/19	Data File:	062155.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	20	121
DBC	80	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-14:1.0	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-19 1/6
Date Analyzed:	06/22/19	Data File:	062156.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	20	121
DBC	82	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.051

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-4:0.10	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-20 1/6
Date Analyzed:	06/22/19	Data File:	062157.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	20	121
DBC	86	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-13:1	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-23 1/6
Date Analyzed:	06/22/19	Data File:	062158.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	20	121
DBC	79	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-5:1	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-24 1/6
Date Analyzed:	06/22/19	Data File:	062159.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	20	121
DBC	79	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-12:0.8	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-27 1/6
Date Analyzed:	06/22/19	Data File:	062160.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	20	121
DBC	94	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.047

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-6:1	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-29 1/6
Date Analyzed:	06/22/19	Data File:	062161.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	20	121
DBC	88	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.029

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-11:1.5	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-30 1/6
Date Analyzed:	06/22/19	Data File:	062213.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID: DUP-14	Client: Environmental Partners
Date Received: 06/19/19	Project: Brookdale 74001.1, F&BI 906393
Date Extracted: 06/20/19	Lab ID: 906393-33 1/6
Date Analyzed: 06/21/19	Data File: 062118.D
Matrix: Soil	Instrument: GC7
Units: mg/kg (ppm) Dry Weight	Operator: VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.027
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-15	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-34 1/6
Date Analyzed:	06/22/19	Data File:	062214.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-16	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-35 1/6
Date Analyzed:	06/22/19	Data File:	062215.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	59	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-17	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-36 1/6
Date Analyzed:	06/22/19	Data File:	062216.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.036

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-10:2.0	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-37 1/6
Date Analyzed:	06/21/19	Data File:	062138.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.022
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.021
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-7:2	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-39 1/6
Date Analyzed:	06/22/19	Data File:	062217.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.033

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-8-1.5	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-41 1/6
Date Analyzed:	06/22/19	Data File:	062218.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	59	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.035

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-9-0.8	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-42 1/6
Date Analyzed:	06/21/19	Data File:	062139.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-9-B-1:0.9	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-45 1/6
Date Analyzed:	06/22/19	Data File:	062219.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-9-SW-1:0.5	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-46 1/6
Date Analyzed:	06/22/19	Data File:	062220.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-9-SW-2:0.5	Client:	Environmental Partners
Date Received:	06/19/19	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	906393-48 1/6
Date Analyzed:	06/22/19	Data File:	062221.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/20/19	Lab ID:	09-1460 mb 1/6
Date Analyzed:	06/21/19	Data File:	062111.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906393
Date Extracted:	06/21/19	Lab ID:	09-1461 mb 1/6
Date Analyzed:	06/21/19	Data File:	062137.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/27/19

Date Received: 06/19/19

Project: Brookdale 74001.1, F&BI 906393

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906393-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	<0.01	74	77	45-111	4
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	<0.01	63	66	50-117	5
beta-BHC	mg/kg (ppm)	0.1	<0.01	70	81	49-109	15
delta-BHC	mg/kg (ppm)	0.1	0.10	80 b	94 b	39-114	16 b
Heptachlor	mg/kg (ppm)	0.1	<0.01	95	106	40-131	11
Aldrin	mg/kg (ppm)	0.1	<0.01	118	148 vo	44-121	23 vo
Heptachlor Epoxide	mg/kg (ppm)	0.1	<0.01	80	93	46-122	15
trans-Chlordane	mg/kg (ppm)	0.1	<0.01	73	86	41-129	16
cis-Chlordane	mg/kg (ppm)	0.1	<0.01	72	83	44-120	14
4,4'-DDE	mg/kg (ppm)	0.1	<0.01	70	105	50-150	40 vo
Endosulfan I	mg/kg (ppm)	0.1	<0.01	86	99	45-124	14
Dieldrin	mg/kg (ppm)	0.1	0.18	79 b	91 b	45-130	14 b
Endrin	mg/kg (ppm)	0.1	<0.01	74	79	50-140	7
4,4'-DDD	mg/kg (ppm)	0.1	<0.01	71	80	26-155	12
Endosulfan II	mg/kg (ppm)	0.1	<0.01	56	62	40-135	10
4,4'-DDT	mg/kg (ppm)	0.1	<0.01	86	93	50-150	8
Endrin Aldehyde	mg/kg (ppm)	0.1	<0.01	72	72	35-139	0
Methoxychlor	mg/kg (ppm)	0.1	<0.01	75	80	28-162	6
Endosulfan Sulfate	mg/kg (ppm)	0.1	<0.01	74	77	40-141	4
Endrin Ketone	mg/kg (ppm)	0.1	<0.01	63	66	41-147	5
Toxaphene	mg/kg (ppm)	4	<1	74	72	50-150	3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/27/19

Date Received: 06/19/19

Project: Brookdale 74001.1, F&BI 906393

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
alpha-BHC	mg/kg (ppm)	0.1	85	56-113
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	85	58-120
beta-BHC	mg/kg (ppm)	0.1	90	70-130
delta-BHC	mg/kg (ppm)	0.1	93	70-130
Heptachlor	mg/kg (ppm)	0.1	92	56-124
Aldrin	mg/kg (ppm)	0.1	93	70-130
Heptachlor Epoxide	mg/kg (ppm)	0.1	91	70-130
trans-Chlordane	mg/kg (ppm)	0.1	92	60-123
cis-Chlordane	mg/kg (ppm)	0.1	98	70-130
4,4'-DDE	mg/kg (ppm)	0.1	98	70-130
Endosulfan I	mg/kg (ppm)	0.1	90	62-124
Dieldrin	mg/kg (ppm)	0.1	94	70-130
Endrin	mg/kg (ppm)	0.1	105	56-147
4,4'-DDD	mg/kg (ppm)	0.1	96	54-137
Endosulfan II	mg/kg (ppm)	0.1	86	42-140
4,4'-DDT	mg/kg (ppm)	0.1	96	25-169
Endrin Aldehyde	mg/kg (ppm)	0.1	82	21-135
Methoxychlor	mg/kg (ppm)	0.1	103	54-154
Endosulfan Sulfate	mg/kg (ppm)	0.1	94	39-148
Endrin Ketone	mg/kg (ppm)	0.1	92	46-134
Toxaphene	mg/kg (ppm)	4	87	56-145

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/27/19

Date Received: 06/19/19

Project: Brookdale 74001.1, F&BI 906393

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR ORGANOCHLORINE PESTICIDES BY EPA METHOD 8081B

Laboratory Code: 906393-33 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	<0.01	76	77	45-111	1
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	<0.01	79	81	50-117	2
beta-BHC	mg/kg (ppm)	0.1	<0.01	84	86	49-109	2
delta-BHC	mg/kg (ppm)	0.1	0.025	79 b	86 b	39-114	8 b
Heptachlor	mg/kg (ppm)	0.1	<0.01	78	84	40-131	7
Aldrin	mg/kg (ppm)	0.1	<0.01	83	86	44-121	4
Heptachlor Epoxide	mg/kg (ppm)	0.1	<0.01	83	87	46-122	5
trans-Chlordane	mg/kg (ppm)	0.1	<0.01	84	88	41-129	5
cis-Chlordane	mg/kg (ppm)	0.1	<0.01	86	92	44-120	7
4,4'-DDE	mg/kg (ppm)	0.1	<0.01	83	88	50-150	6
Endosulfan I	mg/kg (ppm)	0.1	<0.01	80	84	45-124	5
Dieldrin	mg/kg (ppm)	0.1	<0.01	82	86	45-130	5
Endrin	mg/kg (ppm)	0.1	<0.01	92	98	50-140	6
4,4'-DDD	mg/kg (ppm)	0.1	<0.01	90	95	26-155	5
Endosulfan II	mg/kg (ppm)	0.1	<0.01	76	81	40-135	6
4,4'-DDT	mg/kg (ppm)	0.1	<0.01	74	79	50-150	7
Endrin Aldehyde	mg/kg (ppm)	0.1	<0.01	71	72	35-139	1
Methoxychlor	mg/kg (ppm)	0.1	<0.01	84	90	28-162	7
Endosulfan Sulfate	mg/kg (ppm)	0.1	<0.01	81	86	40-141	6
Endrin Ketone	mg/kg (ppm)	0.1	<0.01	84	90	41-147	7
Toxaphene	mg/kg (ppm)	4	<1	81	74	50-150	9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/27/19

Date Received: 06/19/19

Project: Brookdale 74001.1, F&BI 906393

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
alpha-BHC	mg/kg (ppm)	0.1	85	56-113
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	85	58-120
beta-BHC	mg/kg (ppm)	0.1	88	70-130
delta-BHC	mg/kg (ppm)	0.1	92	70-130
Heptachlor	mg/kg (ppm)	0.1	89	56-124
Aldrin	mg/kg (ppm)	0.1	92	70-130
Heptachlor Epoxide	mg/kg (ppm)	0.1	91	70-130
trans-Chlordane	mg/kg (ppm)	0.1	93	60-123
cis-Chlordane	mg/kg (ppm)	0.1	99	70-130
4,4'-DDE	mg/kg (ppm)	0.1	97	70-130
Endosulfan I	mg/kg (ppm)	0.1	90	62-124
Dieldrin	mg/kg (ppm)	0.1	94	70-130
Endrin	mg/kg (ppm)	0.1	104	56-147
4,4'-DDD	mg/kg (ppm)	0.1	96	54-137
Endosulfan II	mg/kg (ppm)	0.1	85	42-140
4,4'-DDT	mg/kg (ppm)	0.1	96	25-169
Endrin Aldehyde	mg/kg (ppm)	0.1	81	21-135
Methoxychlor	mg/kg (ppm)	0.1	102	54-154
Endosulfan Sulfate	mg/kg (ppm)	0.1	93	39-148
Endrin Ketone	mg/kg (ppm)	0.1	91	46-134
Toxaphene	mg/kg (ppm)	4	90	56-145

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

906393

SAMPLE CHAIN OF CUSTODY

ME 06/19/19 COY 1 of 5

Report to Thom Morin; Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

Rebeca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo
USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081- Dieldrin	method 8081- Full Suite	Notes
A0I-7-SW-8:0.5	01	6/19/19	0841	Soil	1								X		
A0I-7-SW-1:0.5	02		0845		1									X	
A0I-7-SW-7:0.5	03		0846		1								X		
A0I-7-SW-2:0.5	04		0849		1								X		
A0I-7-SW-6:0.5	05		0853		1								X		
A0I-7-SW-3:0.8	06		0855		1								X		
A0I-7-SW-5:0.10	07		0859		1								X		
A0I-7-SW-4:0.6	08		0901		1								X		
A0I-7-B-16:1	09		0934		1								X		
A0I-7-B-1:0.9	10		0935		1								X		

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebeca Becerra</u>	<u>Rebeca Becerra</u>	<u>EPI</u>	<u>6/19/19</u>	<u>1700</u>
Received by: <u>[Signature]</u>	<u>Michael Erdli</u>	<u>F&B</u>	<u>6/19/19</u>	<u>↓</u>
Relinquished by:				
Received by:		Samples received at <u>5</u> °C		

906393

SAMPLE CHAIN OF CUSTODY

ME 06/19/19 CW4

Page # 2 of 5

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

Rebeca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo
USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

ANALYSES REQUESTED																
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081-Diesel	Method 8081-Full Suite	Notes	
A01-7-B-16:2	11	6/19/19	0940	Soil	1											HOLD
A01-7-B-1:1.9	12		0945		1											HOLD
A01-7-B-15:1.0	13		0949		1								X			
A01-7-B-2:0.11	14		0951		1								X			
A01-7-B-15:2	15		0953		1								◆			HOLD
A01-7-B-2:1.11	16		0959		1								◆			HOLD
A01-7-B-3:0.9	17		1004		1								X			
A01-7-B-3:1.9	18		1009		1								X			HOLD
A01-7-B-14:1.0	19		1013		1								X			
A01-7-B-4:0.10	20		1016		1								X			

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebeca Becerra</u>	<u>Rebeca Becerra</u>	<u>EPI</u>	<u>6/19/19</u>	<u>8700</u>
Received by: <u>[Signature]</u>	<u>Michael Echell</u>	<u>FLRM</u>	<u>6/19/19</u>	<u>↓</u>
Relinquished by:				
Received by:		Samples received at	<u>5 °C</u>	

906393

SAMPLE CHAIN OF CUSTODY

ME 06/19/19 COY

Page # 3 of 5

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0210 Email thomm@epi-wa.combetsyw@epi-wa.com

SAMPLERS (signature)

Rebecca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8051 Diesel	method 8051 Full Suite	Notes
AOI-7-B-14:2	21	6/19/19	1020	Soil	1										HOLD
AOI-7-B-4:1.1	22		1026		1										HOLD
AOI-7-B-13:1	23		1029		1								X		
AOI-7-B-5:1	24		1035		1								X		
AOI-7-B-13:2	25		1038		1										HOLD
AOI-7-B-5:2	26		1040		1										HOLD
AOI-7-B-12:0.8	27		1050		1								X		
AOI-7-B-12:1.8	28		1058		1										HOLD
AOI-7-B-6:1	29		1059		1								X		
AOI-7-B-11:1.5	30		1112		1								X		

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebecca Becerra</u>	<u>Rebecca Becerra</u>	<u>EPI</u>	<u>6/19/19</u>	<u>1700</u>
Received by: <u>[Signature]</u>	<u>Michael Endlich</u>	<u>FCB</u>	<u>L</u>	<u>1</u>
Relinquished by:				
Received by:		Samples received at <u>5</u> °C		

906393

SAMPLE CHAIN OF CUSTODY

ME 06/19/19

COY

Page # 4 of 5

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

Rebeca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO
Ichijo
USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

ANALYSES REQUESTED																		
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8061	Diethylin	method 8061	Full Suite	Notes	
AOI-7-B-11:2.5	31	6/19/19	1118	soil	1													HOLD
AOI-7-B-6:2.0	32		1121		1													HOLD
DUP-14	33		—		1										X			
DUP-15	34		—		1								X					
DUP-16	35		—		1								X					
DUP-17	36		—		1								X					
AOI-7-B-10:2.0	37		1206		1										X			
AOI-7-B-10:3.0	38		1213		1													HOLD
AOI-7-B-7:2	39		1216		1								X					
AOI-7-B-7:3	40		1224		1													HOLD

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Relinquished by:

Rebeca Becerra

Received by:

Michael Edm

Relinquished by:

Received by:

PRINT NAME

Rebeca BecerraMichael Edm

COMPANY

EPIF4Bn.

DATE

6/19/19

TIME

1760Samples received at 5 °C

906393

SAMPLE CHAIN OF CUSTODY

ME 06/19/19 004

Page # 5 of 5

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St. Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0000 Email thomm@epi-wa.combetsyw@epi-wa.com

SAMPLERS (signature)

Rebecca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081-1 Diethyl- Full Suite	Notes
A0I-7-B-8-1.5	41	6/19/19	1229	Soil	1								X	
A0I-7-B-9-0.8	42	↓	1230	↓	1								X	
A0I-7-B-8-2.5	43	●	1233	↓	1									HOLD
A0I-7-B-9-1.8	44	↓	1236	↓	1									HOLD
A0I-9-B-1:0.9	45	6/19/19	1345	Soil	1								X	
A0I-9-SW-1:0.5	46	↓	1350	↓	1								X	
A0I-9-B-1:1.9	47	↓	1351	↓	1								X	HOLD
A0I-9-SW-2:0.5	48	↓	1356	↓	1								X	

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebecca Becerra</u>	<u>Rebecca Becerra</u>	<u>EPI</u>	<u>6/19/19</u>	<u>1700</u>
Received by: <u>[Signature]</u>	<u>Michael Enchill</u>	<u>FGR</u>	<u>↓</u>	<u>↓</u>
Relinquished by:				
Received by:		Samples received at	<u>5</u> °C	

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 12, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 906430

Dear Mr Morin:

Included are the additional results from the testing of material submitted on June 20, 2019 from the Brookdale 74001.1, F&BI 906430 project. There are 11 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0712R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 20, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 906430 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906430 -01	AOI-9-SW-3:0.5
906430 -02	AOI-9-SW-4:0.5
906430 -03	AOI-10-B-1:1
906430 -04	AOI-10-B-1:2
906430 -05	AOI-10-B-2:1
906430 -06	AOI-10-B-2:2
906430 -07	AOI-10-B-3:1.5
906430 -08	AOI-10-B-3:2.5
906430 -09	AOI-10-B-4:1
906430 -10	AOI-10-B-4:2
906430 -11	AOI-10-B-5:1
906430 -12	AOI-10-B-5:2
906430 -13	AOI-10-B-6:1
906430 -14	AOI-10-B-6:2
906430 -15	AOI-10-B-7:1
906430 -16	DUP-18
906430 -17	DUP-19
906430 -18	AOI-10-B-7:2
906430 -19	AOI-10-B-8:1
906430 -20	AOI-10-B-8:2
906430 -21	AOI-10-B-9:3
906430 -22	AOI-10-B-10:1.5
906430 -23	AOI-10-B-9:4
906430 -24	AOI-10-B-11:1.5
906430 -25	AOI-10-B-10:2.5
906430 -26	AOI-10-B-11:2.5
906430 -27	AOI-10-B-12:2
906430 -28	AOI-10-B-13:1.8
906430 -29	DUP-20
906430 -30	AOI-10-B-12:3
906430 -31	AOI-10-B-13:2.8
906430 -32	AOI-10-SW-8:0.9
906430 -33	AOI-10-SW-1:1.0
906430 -34	AOI-10-SW-2:0.7
906430 -35	AOI-10-SW-3:0.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (Continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906430 -36	AOI-10-SW-4:0.3
906430 -37	AOI-10-SW-5:0.3
906430 -38	AOI-10-SW-6:0.9
906430 -39	AOI-10-SW-7:0.7
906430 -40	AOI-11-SW-1:0.5
906430 -41	AOI-11-SW-2:1
906430 -42	AOI-11-SW-3:0.5
906430 -43	AOI-11-SW-4:1
906430 -44	AOI-11-SW-5:0.4
906430 -45	AOI-11-SW-6:1.0
906430 -46	AOI-11-B-1:1.2
906430 -47	AOI-11-SW-7:0.5
906430 -48	AOI-11-B-1:2.2
906430 -49	AOI-11-B-2:2
906430 -50	AOI-11-B-2:3
906430 -51	AOI-11-B-3:2
906430 -52	AOI-11-B-3:3
906430 -53	DUP-21
906430 -54	AOI-11-B-4:1.2
906430 -55	AOI-11-B-4:2.2
906430 -56	AOI-11-B-5:2
906430 -57	AOI-11-B-5:3
906430 -58	AOI-11-B-6:2
906430 -59	AOI-11-B-6:3
906430 -60	AOI-11-B-7:1.5
906430 -61	AOI-11-B-7:2.5

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-B-2:2	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	07/02/19	Lab ID:	906430-06 1/6
Date Analyzed:	07/05/19	Data File:	070514.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	105	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.013

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-1:2.2	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	07/02/19	Lab ID:	906430-48 1/6
Date Analyzed:	07/05/19	Data File:	070513.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	110	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-3:3	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	07/02/19	Lab ID:	906430-52 1/6
Date Analyzed:	07/05/19	Data File:	070515.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.015

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-5:3	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	07/02/19	Lab ID:	906430-57 1/6
Date Analyzed:	07/05/19	Data File:	070516.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-6:3	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	07/02/19	Lab ID:	906430-59 1/6
Date Analyzed:	07/05/19	Data File:	070517.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-7:2.5	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	07/02/19	Lab ID:	906430-61 1/6
Date Analyzed:	07/05/19	Data File:	070518.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.066

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	07/02/19	Lab ID:	09-1569 mb 1/6
Date Analyzed:	07/03/19	Data File:	070326.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/12/19

Date Received: 06/20/19

Project: Brookdale 74001.1, F&BI 906430

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907001-34 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	117	109	45-130	7

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	73	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY ME 06/20/19

Page # 1 of 7 COY

906430
 Report To Thom Morin, Betsy Wing
 Company EPI
 Address 1180 NW Maple St, Ste 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature) <u>Rebeca Becerra</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS	INVOICE TO <u>Ichijo USA</u>

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround	<input checked="" type="checkbox"/> RUSH <u>1 week</u>
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	<input checked="" type="checkbox"/> Archive Samples
<input type="checkbox"/> Other	

Phone (425) 345-0010 Email info@btsynwapi-wa.com

						ANALYSES REQUESTED																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					</
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Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebeca Becerra</u>	<u>REBECA BECERRA</u>	<u>EPI</u>	<u>6/20/19</u>	<u>1715</u>
Received by: <u>[Signature]</u>	<u>Michael E. [Signature]</u>	<u>F&Bm</u>	<u>↓</u>	<u>↓</u>
Relinquished by:			<u>4</u>	<u>°C</u>
Received by:		Samples received at		

906420

SAMPLE CHAIN OF CUSTODY MC 06/20/19

Page # 2 of 7

Report To Thom Morin; Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

Rebeca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo
USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081-Dieldrin	Method 8081-Full Suite	Notes
<u>B</u> AOI-10-5:1	<u>11</u>	<u>6/20/19</u>	<u>0940</u>	<u>Soil</u>	<u>1</u>								<u>X</u>		
AOI-10-5:2	<u>12</u>	<u>1</u>	<u>0945</u>	<u>1</u>	<u>1</u>										<u>HOLD</u>
AOI-10-6:1	<u>13</u>		<u>1000</u>	<u>1</u>	<u>1</u>								<u>X</u>		
AOI-10-6:2	<u>14</u>		<u>1005</u>	<u>1</u>	<u>1</u>										<u>HOLD</u>
AOI-10-7:1	<u>15</u>		<u>1015</u>	<u>1</u>	<u>1</u>								<u>X</u>		
DUP-18	<u>16</u>		<u>—</u>	<u>1</u>	<u>1</u>								<u>X</u>		
DUP-19	<u>17</u>		<u>—</u>	<u>1</u>	<u>1</u>								<u>X</u>		
AOI-10-B-7:2	<u>18</u>		<u>1020</u>	<u>1</u>	<u>1</u>										<u>HOLD</u>
AOI-10-B-8:1	<u>19</u>		<u>1025</u>	<u>1</u>	<u>1</u>								<u>X</u>		
AOI-10-B-8:2	<u>20</u>	<u>↓</u>	<u>1028</u>	<u>↓</u>	<u>1</u>										<u>HOLD</u>

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebeca Becerra</u>	<u>REBECA BECERRA</u>	<u>EPI</u>	<u>6/20/19</u>	<u>1715</u>
Received by: <u>[Signature]</u>	<u>Michael ECU</u>	<u>F&B</u>	<u>↓</u>	<u>↓</u>
Relinquished by:				
Received by:		Samples received at <u>4</u> °C		

906420

SAMPLE CHAIN OF CUSTODY

ME 06/20/19

Page # 3 of 7

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

Rebecca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO
Ichijo
USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021E	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8061- Diesel	Method 8061- Full Site	Notes
AOI-10-B-9:3	21	6/20/19	1030	Soil										X	
AOI-10-B-10:2.5	22		1032										X		
AOI-10-B-9:4	23		1035												HOLD
AOI-10-B-11:1.5	24		1036										X		
AOI-10-B-10:2.5	25		1040												HOLD
AOI-10-B-11:2.5	26		1050												HOLD
AOI-10-B-12:2	27		1055										X		
AOI-10-B-13:1.8	28		1056											X	
DUP-20	29		—										X		
AOI-10-B-12:3	30		1105												HOLD

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebecca Becerra</u>	REBECA BECERRA	EPI	6/20/19	1517
Received by: <u>[Signature]</u>	Michael [Signature]	FIBer	+	+
Relinquished by:				
Received by:		Samples received at	4 °C	

906430

SAMPLE CHAIN OF CUSTODY ME 06/20/19

Page #

4 of 7

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St. Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

Rebeca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Tehijo USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 881- Dieldrin	method 881- full suite	Notes
AOI-10-B-13:2.8	31	6/20/19	1120	Soil	1										HOLD
AOI-10-SW-8:0.9	32		1121		1								X		
AOI-10-SW-1:1.0	33		1125		1									X	
AOI-10-SW-2:0.7	34		1130		1								X		
AOI-10-SW-3:0.9	35		1135		1								X		
AOI-10-SW-4:0.3	36		1140		1								X		
AOI-10-SW-5:0.3	37		1145		1								X		
AOI-10-SW-6:0.9	38		1150		1								X		
AOI-10-SW-7:0.7	39		1155		1								X		
AOI-11-SW-1:0.5	40		1255										X		

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Relinquished by:

Rebeca Becerra

PRINT NAME

REBECA BECERRA

COMPANY

EPI

DATE

6/20/19

TIME

1517

Received by:

[Signature]Michael E. L. V.Febm

Relinquished by:

Received by:

Samples received at 4 °C

906430

SAMPLE CHAIN OF CUSTODY MC 00/20/19

Page # 5 of 7

Report To Thom Moring Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0070 Email thom@epi-wa.combetsy@epi-wa.com

SAMPLERS (signature)

Rebeca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo
USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081-Dieldrin	Method 8081-Full Site	Notes
AOT-11-SW-2:1	41	6/20/19	1300	soil	1								X		
AOT-11-SW-3:0.5	42		1305											X	
AOT-11-SW-4:1	43		1310										X		
AOT-11-SW-5:0.4	44		1312										X		
AOT-11-SW-6:1.0	45		1314										X		
AOT-11-B-1:1.2	46		1317										X		
AOT-11-SW-7:0.5	47		1319										X		
AOT-11-B-1:2.2	48		1320										X		HOLD
AOT-11-B-2:2	49		1325										X		
AOT-11-B-2:3	50		1328										X		HOLD

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebeca Becerra</u>	<u>REBECA BECERRA</u>	<u>EPI</u>	<u>6/20/19</u>	<u>1511</u>
Received by: <u>Michael Eddy</u>	<u>Michael Eddy</u>	<u>Furn</u>	<u>↓</u>	<u>0517</u>
Relinquished by:				
Received by:				
Samples received at <u>4</u> °C				

906430

SAMPLE CHAIN OF CUSTODY ME 06/20/19

Page # 6 of 7

Report To Thom Marin, Betsy Wing

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 425-3950810 Email thommar@epi-wa.com

betsyw@epi-wa.com

SAMPLERS (signature)

Rebecca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Tchijo
USA

TURNAROUND TIME

☐ Standard Turnaround

RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081	Method 8081	Method 8081	
AOI-11-B-3:2	51	6/20/19	1331	Soil	1								X			
AOI-11-B-3:3	52		1335										X			HOLD
DUP-21	53												X			
AOI-11-B-4:1.2	54		1340										X			
AOI-11-B-4:2.2	55		1344										X			HOLD
AOI-11-B-5:2	56		1350										X			
AOI-11-B-5:3	57		1353										X			HOLD
AOI-11-B-6:32	58		1356										X			
AOI-11-B-6:3	59		1359										X			HOLD
AOI-11-B-7:1.5	60	✓	1401	✓	✓								X			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Rebecca Becerra	REBECA BECERRA	EPI	6/20/19	15:17
Received by: [Signature]	Michael L. L...	FLA	L	L
Relinquished by:				
Received by:		Samples received at	-4 °C	

906430

SAMPLE CHAIN OF CUSTODY ME 06/20/19

Page # 7 of 7

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0110 Email thom@epi-wa.com
betsy@epi-wa.com

SAMPLERS (signature)

Rebecca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO
Ichijo
USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081	Method 8081	Method 8081	
ADI-11-B-7.2.5	61	6/20/19	1405	Soil	1								Method 8081	Method 8081	Method 8081	HOLD

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebecca Becerra</u>	REBECA BECERRA	EPI	6/20/19	1517
Received by: <u>Michael Enchil</u>	Michael Enchil	F&B		
Relinquished by: <u> </u>				
Received by: <u> </u>		Samples received at <u>44</u> °C		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 1, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 906430

Dear Mr Morin:

Included are the results from the testing of material submitted on June 20, 2019 from the Brookdale 74001.1, F&BI 906430 project. There are 53 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0701R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 20, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 906430 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906430 -01	AOI-9-SW-3:0.5
906430 -02	AOI-9-SW-4:0.5
906430 -03	AOI-10-B-1:1
906430 -04	AOI-10-B-1:2
906430 -05	AOI-10-B-2:1
906430 -06	AOI-10-B-2:2
906430 -07	AOI-10-B-3:1.5
906430 -08	AOI-10-B-3:2.5
906430 -09	AOI-10-B-4:1
906430 -10	AOI-10-B-4:2
906430 -11	AOI-10-B-5:1
906430 -12	AOI-10-B-5:2
906430 -13	AOI-10-B-6:1
906430 -14	AOI-10-B-6:2
906430 -15	AOI-10-B-7:1
906430 -16	DUP-18
906430 -17	DUP-19
906430 -18	AOI-10-B-7:2
906430 -19	AOI-10-B-8:1
906430 -20	AOI-10-B-8:2
906430 -21	AOI-10-B-9:3
906430 -22	AOI-10-B-10:1.5
906430 -23	AOI-10-B-9:4
906430 -24	AOI-10-B-11:1.5
906430 -25	AOI-10-B-10:2.5
906430 -26	AOI-10-B-11:2.5
906430 -27	AOI-10-B-12:2
906430 -28	AOI-10-B-13:1.8
906430 -29	DUP-20
906430 -30	AOI-10-B-12:3
906430 -31	AOI-10-B-13:2.8
906430 -32	AOI-10-SW-8:0.9
906430 -33	AOI-10-SW-1:1.0
906430 -34	AOI-10-SW-2:0.7
906430 -35	AOI-10-SW-3:0.9
906430 -36	AOI-10-SW-4:0.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906430 -37	AOI-10-SW-5:0.3
906430 -38	AOI-10-SW-6:0.9
906430 -39	AOI-10-SW-7:0.7
906430 -40	AOI-11-SW-1:0.5
906430 -41	AOI-11-SW-2:1
906430 -42	AOI-11-SW-3:0.5
906430 -43	AOI-11-SW-4:1
906430 -44	AOI-11-SW-5:0.4
906430 -45	AOI-11-SW-6:1.0
906430 -46	AOI-11-B-1:1.2
906430 -47	AOI-11-SW-7:0.5
906430 -48	AOI-11-B-1:2.2
906430 -49	AOI-11-B-2:2
906430 -50	AOI-11-B-2:3
906430 -51	AOI-11-B-3:2
906430 -52	AOI-11-B-3:3
906430 -53	DUP-21
906430 -54	AOI-11-B-4:1.2
906430 -55	AOI-11-B-4:2.2
906430 -56	AOI-11-B-5:2
906430 -57	AOI-11-B-5:3
906430 -58	AOI-11-B-6:2
906430 -59	AOI-11-B-6:3
906430 -60	AOI-11-B-7:1.5
906430 -61	AOI-11-B-7:2.5

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-9-SW-3:0.5	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-01 1/6
Date Analyzed:	06/21/19	Data File:	062140.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-9-SW-4:0.5	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/25/19	Lab ID:	906430-02 1/6
Date Analyzed:	06/25/19	Data File:	062549.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-B-1:1	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/25/19	Lab ID:	906430-03 1/6
Date Analyzed:	06/25/19	Data File:	062550.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.034

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-B-2:1	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-05 1/6
Date Analyzed:	06/22/19	Data File:	062238.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.16

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-B-3:1.5	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-07 1/6
Date Analyzed:	06/22/19	Data File:	062239.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.035

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-B-4:1	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-09 1/6
Date Analyzed:	06/22/19	Data File:	062240.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-B-5:1	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-11 1/6
Date Analyzed:	06/22/19	Data File:	062241.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-B-6:1	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-13 1/6
Date Analyzed:	06/22/19	Data File:	062242.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-B-7:1	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-15 1/6
Date Analyzed:	06/22/19	Data File:	062222.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-18	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-16 1/6
Date Analyzed:	06/22/19	Data File:	062225.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-19	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-17 1/6
Date Analyzed:	06/22/19	Data File:	062226.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-B-8:1	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-19 1/6
Date Analyzed:	06/22/19	Data File:	062227.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-B-9:3	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-21 1/6
Date Analyzed:	06/21/19	Data File:	062133.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-B-10:1.5	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-22 1/6
Date Analyzed:	06/22/19	Data File:	062228.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-B-11:1.5	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-24 1/6
Date Analyzed:	06/22/19	Data File:	062229.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-B-12:2	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-27 1/6
Date Analyzed:	06/22/19	Data File:	062230.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-B-13:1.8	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-28 1/6
Date Analyzed:	06/21/19	Data File:	062134.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-20	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-29 1/6
Date Analyzed:	06/22/19	Data File:	062231.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-SW-8:0.9	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-32 1/6
Date Analyzed:	06/22/19	Data File:	062232.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.20

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-SW-1:1.0	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-33 1/6
Date Analyzed:	06/21/19	Data File:	062135.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-SW-2:0.7	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-34 1/6
Date Analyzed:	06/24/19	Data File:	062409.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-SW-3:0.9	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-35 1/6
Date Analyzed:	06/22/19	Data File:	062233.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	57	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-SW-4:0.3	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-36 1/6
Date Analyzed:	06/22/19	Data File:	062234.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.059

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-SW-5:0.3	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-37 1/6
Date Analyzed:	06/22/19	Data File:	062235.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-SW-6:0.9	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/25/19	Lab ID:	906430-38 1/6
Date Analyzed:	06/25/19	Data File:	062505.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-SW-7:0.7	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/25/19	Lab ID:	906430-39 1/6
Date Analyzed:	06/25/19	Data File:	062506.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-1:0.5	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/25/19	Lab ID:	906430-40 1/6
Date Analyzed:	06/25/19	Data File:	062507.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.14

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-2:1	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/25/19	Lab ID:	906430-41 1/6
Date Analyzed:	06/25/19	Data File:	062508.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	59	50	150
DBC	73	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-3:0.5	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	906430-42 1/6
Date Analyzed:	06/21/19	Data File:	062136.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.013
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.019
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-4:1	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/25/19	Lab ID:	906430-43 1/6
Date Analyzed:	06/25/19	Data File:	062509.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	59	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.076

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-5:0.4	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/25/19	Lab ID:	906430-44 1/6
Date Analyzed:	06/25/19	Data File:	062510.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-6:1.0	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/25/19	Lab ID:	906430-45 1/6
Date Analyzed:	06/25/19	Data File:	062511.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	59	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-1:1.2	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/25/19	Lab ID:	906430-46 1/6
Date Analyzed:	06/25/19	Data File:	062512.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	58	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.068

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-7:0.5	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/25/19	Lab ID:	906430-47 1/6
Date Analyzed:	06/25/19	Data File:	062513.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.037

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-2:2	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/25/19	Lab ID:	906430-49 1/6
Date Analyzed:	06/25/19	Data File:	062514.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	59	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.012

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-3:2	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/25/19	Lab ID:	906430-51 1/6
Date Analyzed:	06/25/19	Data File:	062515.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.17

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-21	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/25/19	Lab ID:	906430-53 1/6
Date Analyzed:	06/25/19	Data File:	062516.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.12

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-4:1.2	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/25/19	Lab ID:	906430-54 1/6
Date Analyzed:	06/25/19	Data File:	062517.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-5:2	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/25/19	Lab ID:	906430-56 1/60
Date Analyzed:	06/27/19	Data File:	062661.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67 d	50	150
DBC	87 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.80

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-6:2	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/25/19	Lab ID:	906430-58 1/60
Date Analyzed:	06/27/19	Data File:	062662.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69 d	50	150
DBC	99 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-7:1.5	Client:	Environmental Partners
Date Received:	06/20/19	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/25/19	Lab ID:	906430-60 1/60
Date Analyzed:	06/27/19	Data File:	062663.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69 d	50	150
DBC	91 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.61

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	09-1469 mb 1/6
Date Analyzed:	06/21/19	Data File:	062131.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	09-1470 mb 1/6
Date Analyzed:	06/24/19	Data File:	062408.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/25/19	Lab ID:	09-1486 mb 1/6
Date Analyzed:	06/25/19	Data File:	062527.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	97	50	150
DBC	109	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906430
Date Extracted:	06/21/19	Lab ID:	09-1461 mb2 1/6
Date Analyzed:	06/21/19	Data File:	062132.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/01/19

Date Received: 06/20/19

Project: Brookdale 74001.1, F&BI 906430

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906430-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	82	77	45-130	6

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/01/19

Date Received: 06/20/19

Project: Brookdale 74001.1, F&BI 906430

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906430-34 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	80	81	45-130	1

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	91	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/01/19

Date Received: 06/20/19

Project: Brookdale 74001.1, F&BI 906430

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906474-33 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	92	95	45-130	3

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	107	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/01/19

Date Received: 06/20/19

Project: Brookdale 74001.1, F&BI 906430

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906393-33 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	<0.01	76	77	45-111	1
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	<0.01	79	81	50-117	2
beta-BHC	mg/kg (ppm)	0.1	<0.01	84	86	49-109	2
delta-BHC	mg/kg (ppm)	0.1	0.025	79 b	86 b	39-114	8 b
Heptachlor	mg/kg (ppm)	0.1	<0.01	78	84	40-131	7
Aldrin	mg/kg (ppm)	0.1	<0.01	83	86	44-121	4
Heptachlor Epoxide	mg/kg (ppm)	0.1	<0.01	83	87	46-122	5
trans-Chlordane	mg/kg (ppm)	0.1	<0.01	84	88	41-129	5
cis-Chlordane	mg/kg (ppm)	0.1	<0.01	86	92	44-120	7
4,4'-DDE	mg/kg (ppm)	0.1	<0.01	83	88	50-150	6
Endosulfan I	mg/kg (ppm)	0.1	<0.01	80	84	45-124	5
Dieldrin	mg/kg (ppm)	0.1	<0.01	82	86	45-130	5
Endrin	mg/kg (ppm)	0.1	<0.01	92	98	50-140	6
4,4'-DDD	mg/kg (ppm)	0.1	<0.01	90	95	26-155	5
Endosulfan II	mg/kg (ppm)	0.1	<0.01	76	81	40-135	6
4,4'-DDT	mg/kg (ppm)	0.1	<0.01	74	79	50-150	7
Endrin Aldehyde	mg/kg (ppm)	0.1	<0.01	71	72	35-139	1
Methoxychlor	mg/kg (ppm)	0.1	<0.01	84	90	28-162	7
Endosulfan Sulfate	mg/kg (ppm)	0.1	<0.01	81	86	40-141	6
Endrin Ketone	mg/kg (ppm)	0.1	<0.01	84	90	41-147	7
Toxaphene	mg/kg (ppm)	4	<1	81	74	50-150	9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/01/19

Date Received: 06/20/19

Project: Brookdale 74001.1, F&BI 906430

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR ORGANOCHLORINE PESTICIDES BY EPA METHOD 8081B

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
alpha-BHC	mg/kg (ppm)	0.1	85	56-113
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	85	58-120
beta-BHC	mg/kg (ppm)	0.1	88	70-130
delta-BHC	mg/kg (ppm)	0.1	92	70-130
Heptachlor	mg/kg (ppm)	0.1	89	56-124
Aldrin	mg/kg (ppm)	0.1	92	70-130
Heptachlor Epoxide	mg/kg (ppm)	0.1	91	70-130
trans-Chlordane	mg/kg (ppm)	0.1	93	60-123
cis-Chlordane	mg/kg (ppm)	0.1	99	70-130
4,4'-DDE	mg/kg (ppm)	0.1	97	70-130
Endosulfan I	mg/kg (ppm)	0.1	90	62-124
Dieldrin	mg/kg (ppm)	0.1	94	70-130
Endrin	mg/kg (ppm)	0.1	104	56-147
4,4'-DDD	mg/kg (ppm)	0.1	96	54-137
Endosulfan II	mg/kg (ppm)	0.1	85	42-140
4,4'-DDT	mg/kg (ppm)	0.1	96	25-169
Endrin Aldehyde	mg/kg (ppm)	0.1	81	21-135
Methoxychlor	mg/kg (ppm)	0.1	102	54-154
Endosulfan Sulfate	mg/kg (ppm)	0.1	93	39-148
Endrin Ketone	mg/kg (ppm)	0.1	91	46-134
Toxaphene	mg/kg (ppm)	4	90	56-145

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

906430

SAMPLE CHAIN OF CUSTODY

ME 06/20/19

COY

Page # 1 of 7

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

Rebeca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo
USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

betsyw@epi-wa.com						ANALYSES REQUESTED												
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081-Dieldrin	Method 8081-Full Suite			Notes	
A0I-9-SW-3:0.5	01	6/20/19	0815	Soil	1								X					
A0I-9-SW-4:0.5	02		0820		1								X					
A0I-10-B-1:1	03		0840		1								X					
A0I-10-B-1:2	04		0850		1													HOLD
A0I-10-B-2:1	05		0855		1								X					
A0I-10-B-2:2	06		0905		1													HOLD
A0I-10-B-3:1.5	07		0910		1								X					
A0I-10-B-3:2.5	08		0920		1													HOLD
A0I-10-B-4:1	09		0925		1								X					
A0I-10-B-4:2	10		0930		1													HOLD

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Relinquished by:

Rebeca Becerra

PRINT NAME

Received by:

Relinquished by:

Received by:

REBECA BECERRAMichael E. LU

COMPANY

EPIF&Bm

DATE

6/20/19

TIME

171511Samples received at 4 °C

906420

SAMPLE CHAIN OF CUSTODY MC 00/20/19

004

Page # 2 of 7

Report To Thom Morin; Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

Rebeca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo
USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

BATSIGN-001-NA.COM						ANALYSES REQUESTED											
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081-Dieldrin	Method 8081-Full Suite			Notes
^B AOI-10-5:1	11	6/20/19	0940	Soil	1								X				
AOI-10 ^B -5:2	12		0945		1												HOLD
AOI-10 ^B -6:1	13		1000		1								X				
AOI-10 ^B -6:2	14		1005		1												HOLD
AOI-10 ^B -7:1	15		1015		1								X				
DUP ^t -18	16		—		1								X				
DUP-19	17		—		1								X				
AOI-10-B-7:2	18		1020		1												HOLD
AOI-10-B-8:1	19		1025		1								X				
AOI-10-B-8:2	20	↓	1028	↓	1												HOLD

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Relinquished by:

Rebeca Becerra

PRINT NAME

REBECA BECERRA

COMPANY

EPI

DATE

6/20/19

TIME

1715

Received by:

[Signature]

Michael ECU

F&B

↓

↓

Relinquished by:

Received by:

Samples received at 4 °C

906420

SAMPLE CHAIN OF CUSTODY

ME 06/20/19

Page # 3 of 7

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

Rebeca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo
USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

bc134w@epi-wa.com

						ANALYSES REQUESTED													
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081-Dieldrin	Method 8081-Full Site			Notes		
AOI-10-B-9:3	21	6/20/19	1030	Soil										X					
AOI-10-B-10:2.5	22	↓	1032	↓									X						
AOI-10-B-9:4	23		1035															HOLD	
AOI-10-B-11:1.5	24		1036											X					
AOI-10-B-10:2.5	25		1040															HOLD	
AOI-10-B-11:2.5	26		1050															HOLD	
AOI-10-B-12:2	27		1055												X				
AOI-10-B-13:1.8	28		1056													X			
DUP-20	29		—												X				
AOI-10-B-12:3	30		↓		1105	↓													HOLD

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Relinquished by:

Rebeca Becerra

PRINT NAME

REBECA BECERRA

COMPANY

EPI

DATE

6/20/19

TIME

1517

Received by:

[Signature]Michael L. L.FIBm↓↓

Relinquished by:

Received by:

Samples received at 4 °C

906430

SAMPLE CHAIN OF CUSTODY ME 06/20/19

Report To Thom Morin; Betsy Wing
 Company EPI
 Address 1180 NW Maple St, Ste 310
 City, State, ZIP Issaquah, WA 98027
 Phone 425-395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

Rebeca BecerraPage # 4 of 7

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by: _____

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Tehijo USA

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other _____

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 881- Dredging	method 881- Full Suite	Notes
AOI-10-B-13:2.8	31	6/20/19	1120	Soil	1										HOLD
AOI-10-SW-8:0.9	32		1121		1								X		
AOI-10-SW-1:1.0	33		1125		1									X	
AOI-10-SW-2:0.7	34		1130		1								X		
AOI-10-SW-3:0.9	35		1135		1								X		
AOI-10-SW-4:0.3	36		1140		1								X		
AOI-10-SW-5:0.3	37		1145		1								X		
AOI-10-SW-6:0.9	38		1150		1								X		
AOI-10-SW-7:0.7	39		1155		1								X		
AOI-11-SW-1:0.5	40		1255										X		

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Relinquished by:

Rebeca Becerra

PRINT NAME

REBECA BECERRA

COMPANY

EPI

DATE

6/20/19

TIME

1517

Received by:

Relinquished by:

Received by:

Michael ErdlyFeldmSamples received at 4 °C

906430

SAMPLE CHAIN OF CUSTODY

ME 06/20/19

Page # 5 of 7

Report To Thom Moring Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah WA 98027Phone 425-395-0010 Email thomm@epi-wa.combetsyw@epi-wa.com

SAMPLERS (signature)

Rebeca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo
USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081-Dieldrin	method 8081-Full Suite			
AOT-11-SW-2:1	41	6/20/19	1300	soil	1								X				
AOT-11-SW-3:0.5	42		1305											X			
AOT-11-SW-4:1	43		1310										X				
AOT-11-SW-5:0.4	44		1312										X				
AOT-11-SW-6:1.0	45		1314										X				
AOT-11-B-1:1.2	46		1317										X				
AOT-11-SW-7:0.5	47		1319										X				
AOT-11-B-1:2.2	48		1320														HOLD
AOT-11-B-2:2	49		1325										X				
AOT-11-B-2:3	50		1328														HOLD

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Relinquished by:

Rebeca Becerra

Received by:

Relinquished by:

Received by:

PRINT NAME

REBECA BECERRAMichael E. Hall

COMPANY

EPIFurn

DATE

6/20/19↓

TIME

15171517Samples received at 4 °C

906430

SAMPLE CHAIN OF CUSTODY

ME 06/20/19

copy

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-3950810 Email thom@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

Rebecca BecerraPage # 6 of 7

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo
USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other _____

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 Diebold	Method 8081 Full Suite	Notes
AOI-11-B-3:2	51	6/20/19	1331	Soil	1								X		
AOI-11-B-3:3	52		1335												HOLD
DUP-21	53		—										X		
AOI-11-B-4:1.2	54		1340										X		
AOI-11-B-4:2.2	55		1344												HOLD
AOI-11-B-5:2	56		1350										X		
AOI-11-B-5:3	57		1353												HOLD
AOI-11-B-6:2	58		1356										X		
AOI-11-B-6:3	59		1359												HOLD
AOI-11-B-7:1.5	60	✓	1401	✓	✓								X		

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Relinquished by: Rebecca BecerraReceived by: [Signature]

Relinquished by: _____

Received by: _____

PRINT NAME

REBECA BECERRAM. Mel Endri

COMPANY

EPIPLA

DATE

6/20/19L

TIME

15:11LSamples received at 4 °C

906430

SAMPLE CHAIN OF CUSTODY ME 06/20/19

Report To Thom Morin, Betsy Wing

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature)

Rebecca Beerra

Page # 7 of 7

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Ichijo

USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED											Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081 Dieldrin	method 8081 Full Suite			
ADI-11-B-7:2.5	61	6/20/19	1405	Soil	1												HOLD

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Rebecca Beerra	REBECA BEERRA	EPI	6/20/19	1517
Received by: Michael Erskel	Michael Erskel	F&B	-	L
Relinquished by:				
Received by:		Samples received at	44 °C	

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 2, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 906474

Dear Mr Morin:

Included are the additional results from the testing of material submitted on June 24, 2019 from the Brookdale 74001.1, F&BI 906474 project. There are 5 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0802R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 24, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 906474 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906474-01	AOI-11-B-8:2
906474-02	AOI-11-B-8:3
906474-03	AOI-11-B-9:1.5
906474-04	AOI-11-B-9:2.5
906474-05	AOI-11-B-10:1.5
906474-06	AOI-11-B-10:2.5
906474-07	AOI-11-B-11:1.5
906474-08	AOI-11-B-11:2.5
906474-09	AOI-11-B-12:1
906474-10	AOI-11-B-12:2
906474-11	AOI-11-B-13:1.2
906474-12	AOI-11-B-13:2.2
906474-13	AOI-11-B-14:1.5
906474-14	AOI-11-B-14:2.5
906474-15	DUP-22
906474-16	AOI-12-SW-1:1
906474-17	AOI-12-SW-2:2
906474-18	AOI-12-SW-3:1.5
906474-19	AOI-12-SW-4:1
906474-20	AOI-12-SW-5:0.8
906474-21	AOI-12-SW-6:0.5
906474-22	AOI-12-SW-7:0.5
906474-23	AOI-12-SW-8:0.4
906474-24	AOI-12-SW-9:1
906474-25	AOI-12-B-1:1.5
906474-26	AOI-12-B-1:2.5
906474-27	AOI-12-B-2:1.5
906474-28	AOI-12-B-2:2.5
906474-29	AOI-12-B-3:1.5
906474-30	AOI-12-B-3:2.5
906474-31	DUP-23
906474-32	DUP-24
906474-33	AOI-12-B-4:2.3
906474-34	AOI-12-B-4:3.3
906474-35	AOI-12-B-5:2.3
906474-36	AOI-12-B-5:3.3
906474-37	AOI-12-B-6:2.3
906474-38	AOI-12-B-6:3.3

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-11:2.5	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	07/29/19	Lab ID:	906474-08 1/6
Date Analyzed:	07/30/19	Data File:	073036.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.046

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	07/29/19	Lab ID:	09-1803 mb 1/6
Date Analyzed:	07/30/19	Data File:	073008.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	93	50	150
DBC	110	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/19

Date Received: 06/24/19

Project: Brookdale 74001.1, F&BI 906474

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907493-04 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	75	68	45-130	10

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

906474

SAMPLE CHAIN OF CUSTODY ME 06/24/19

804

Page # 1 of 4

Report To Thom Mein, Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0012 Email thom@epi-wa.combetsy@epi-wa.comSAMPLERS (signature) Rebecca Becerra

PROJECT NAME

PO #

REMARKS

Brookdale74001.1

INVOICE TO

EdwardsUSA

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

TPH-HCID
TPH-Diesel
TPH-Gasoline
BTEX by 8021B
VOCs by 8260C
SVOCs by 8270D
PAHs 8270D SIM
Method 8081-
Diluting
Method 8081-
Full Suite☒ - per BW
7/15/19
Notes ME

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081- Diluting Method 8081- Full Suite	
AOI-11-B-8:2	01	6/24/19	0821	Soil	1								X	
AOI-11-B-8:3	02		0824		1								X	
AOI-11-B-9:1.5	03		0834		1								X	
AOI-11-B-9:2.5	04		0836		1								X	
AOI-11-B-10:1.5	05		0841		1								X	
AOI-11-B-10:2.5	06		0844		1								X	
AOI-11-B-11:1.5	07		0850		1								X	
AOI-11-B-11:2.5	08		0851		1								X	
AOI-11-B-12:1	09		0901		1								X	
AOI-11-B-12:2	10		0904		1								X	

HOLDHOLDHOLDHOLDHOLDHOLDHOLDHOLDHOLDHOLDHOLDHOLDHOLDHOLD

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebecca Becerra</u>	<u>Rebecca Becerra</u>	<u>EP1</u>	<u>6/24/19</u>	<u>0635</u>
Relinquished by: <u>Michael Endell</u>	<u>Michael Endell</u>	<u>IRBm</u>	<u>6/24/19</u>	<u>1</u>
Received by:				

Samples received at 7:00

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

986434

SAMPLE CHAIN OF CUSTODY

ME 06/24/19

2 of 4

Report To: Thom Morin; Betsy WangCompany: EP1Address: 1180 NW Maple St, Ste 310City, State, ZIP: Issaquah, WA 98027Phone: 425-395-00 Email: thom@epi-wa.com
to betsy@epi-wa.com

SAMPLERS (signature)

Rebecca Beerna

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

Invoice to USA

Page # of

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HClD	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 - Dieldrin	Method 8081 - Full Suite	Notes
AOI-11-B-13:1.2	11	6/24/19	0915	Soil	1								X		HOLD
AOI-11-B-13:2.2	12		0920										X		HOLD
AOI-11-B-14:1.5	13		0927										X		
AOI-11-B-14:2.5	14		0937										X		HOLD
DUP-22	15												X		
AOI-12-SW-1:1	16		1100										X		
AOI-12-SW-2:2	17		1105										X		
AOI-12-SW-3:1.5	18		1110										X		
AOI-12-SW-4:1	19		1112										X		
AOI-12-SW-5:0.8	20		1115										X		

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Rebecca Beerna

PRINT NAME

REBECCA BEERNA

COMPANY

EP1

DATE

6/24/19

TIME

0835

Received by:

Received by:

Michael EccleReceived by:Samples received at 400

906474

SAMPLE CHAIN OF CUSTODY

ME 06/24/19 3 of 4 Bay

Report to: Thom Morin; Betsy Kling

Company: EPI

Address: 1180 NW Maple St, Ste 310

City, State, ZIP: Tussock, WA 98027

Phone: 425-395-0010 Email: thom@epi-wa.com

betsy@epi-wa.com

SAMPLERS (signature) <u>Rebecca Brown</u>	
PROJECT NAME	PO #
<u>Brookdale</u>	<u>74001.1</u>
REMARKS	INVOICE TO
	<u>Idigo USA</u>

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround	<input checked="" type="checkbox"/> RUSH
Rush charges authorized by: <u>WEEK</u>	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	<input checked="" type="checkbox"/> Archive Samples
<input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8061-Dieldrin	Method 8061-Full suite		
AOI-12-SW-6:0.5	21	6/21/19	1116	Soil	1								X			
AOI-12-SW-7:0.5	22		1120										X			
AOI-12-SW-8:0.4	23		1124										X			
AOI-12-SW-9:1	24		1127										X			
AOI-12-B-1:1.5	25		1145										X			
AOI-12-B-1:2.5	26		1147													HOLD
AOI-12-B-2:1.5	27		1151										X			
AOI-12-B-2:2.5	28		1153													HOLD
AOI-12-B-3:1.5	29		1155												X	
AOI-12-B-3:2.5	30		1159													HOLD

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>Rebecca Brown</u>		<u>REBECCA BROWN</u>		<u>EPI</u>		<u>6/21/19</u>		<u>0615</u>	
Received by: <u>M. Chelle</u>		<u>M. Chelle</u>		<u>EA</u>		<u>6/24/19</u>		<u>1</u>	
Relinquished by:									
Received by:				Samples received at:		<u>4</u>		<u>00</u>	

906424

SAMPLE CHAIN OF CUSTODY

ME 06/24/19

804

Report To: Thom Morris, Betsy Wing

Company: EP1

Address: 1180 NW Maple St, Ste 310

City, State, ZIP: Issaquah, WA 98027

Phone: 425-395-0010 Email: thom@ep1-wa.com

betsy@ep1-wa.com

SAMPLERS (signature) Rebecca Beerna

PROJECT NAME: Brookdale

PO #: 74001.1

REMARKS

INVOICE TO: Idrijo USA

TURNAROUND TIME
☐ Standard Turnaround
☒ RUSH 1 week
 Rush charges authorized by: _____
 SAMPLE DISPOSAL
☐ Dispose after 90 days
☒ Archive Samples
☐ Other _____

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8061-Dieldrin	Method 8061-Full Suite		
DUP-23	31	6/21/19	---	soil	1											
DUP-24	32		---											X		
AOI-12-B-4:2.3	33		1246											X		
AOI-12-B-4:3.3	34		1249											X		HOLD
AOI-12-B-5:2.3	35		1254											X		
AOI-12-B-5:3.3	36		1256													HOLD
AOI-12-B-6:2.3	37		1257											X		
AOI-12-B-6:3.3	38		1300											X		HOLD

Friedman & Bruya, Inc.
 8012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 265-8282

SIGNATURE		PRINT NAME		COMPANY	DATE	TIME
Relinquished by:	<u>Rebecca Beerna</u>	REBECA BEERNA	EP1			
Received by:	<u>Michael E. Eli</u>	Michael E. Eli	FRAN		6/24/19	1635
Relinquished by:						
Received by:				Samples received at	1600	

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 3, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 906474

Dear Mr Morin:

Included are the results from the testing of material submitted on June 24, 2019 from the Brookdale 74001.1, F&BI 906474 project. There are 32 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0703R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 24, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 906474 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906474 -01	AOI-11-B-8:2
906474 -02	AOI-11-B-8:3
906474 -03	AOI-11-B-9:1.5
906474 -04	AOI-11-B-9:2.5
906474 -05	AOI-11-B-10:1.5
906474 -06	AOI-11-B-10:2.5
906474 -07	AOI-11-B-11:1.5
906474 -08	AOI-11-B-11:2.5
906474 -09	AOI-11-B-12:1
906474 -10	AOI-11-B-12:2
906474 -11	AOI-11-B-13:1.2
906474 -12	AOI-11-B-13:2.2
906474 -13	AOI-11-B-14:1.5
906474 -14	AOI-11-B-14:2.5
906474 -15	DUP-22
906474 -16	AOI-12-SW-1:1
906474 -17	AOI-12-SW-2:2
906474 -18	AOI-12-SW-3:1.5
906474 -19	AOI-12-SW-4:1
906474 -20	AOI-12-SW-5:0.8
906474 -21	AOI-12-SW-6:0.5
906474 -22	AOI-12-SW-7:0.5
906474 -23	AOI-12-SW-8:0.4
906474 -24	AOI-12-SW-9:1
906474 -25	AOI-12-B-1:1.5
906474 -26	AOI-12-B-1:2.5
906474 -27	AOI-12-B-2:1.5
906474 -28	AOI-12-B-2:2.5
906474 -29	AOI-12-B-3:1.5
906474 -30	AOI-12-B-3:2.5
906474 -31	DUP-23
906474 -32	DUP-24
906474 -33	AOI-12-B-4:2.3
906474 -34	AOI-12-B-4:3.3
906474 -35	AOI-12-B-5:2.3
906474 -36	AOI-12-B-5:3.3
906474 -37	AOI-12-B-6:2.3
906474 -38	AOI-12-B-6:3.3

The 8081B calibration standard failed the acceptance criteria for several analytes. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-8:2	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-01 1/6
Date Analyzed:	06/26/19	Data File:	062558.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.35

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-9:1.5	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-03 1/6
Date Analyzed:	06/26/19	Data File:	062606.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	111	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.094

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-10:1.5	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-05 1/6
Date Analyzed:	06/26/19	Data File:	062626.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-11:1.5	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-07 1/6
Date Analyzed:	06/27/19	Data File:	062657.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.23

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-12:1	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-09 1/6
Date Analyzed:	06/27/19	Data File:	062658.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-13:1.2	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-11 1/6
Date Analyzed:	06/27/19	Data File:	062659.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.045

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-14:1.5	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-13 1/6
Date Analyzed:	06/27/19	Data File:	062660.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.16

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-22	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-15 1/6
Date Analyzed:	06/26/19	Data File:	062612.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.12

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-SW-1:1	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-16 1/6
Date Analyzed:	06/26/19	Data File:	062613.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.29

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-SW-2:2	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-17 1/6
Date Analyzed:	06/26/19	Data File:	062614.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.13

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-SW-3:1.5	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-18 1/6
Date Analyzed:	06/25/19	Data File:	062536.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01 ca
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01 ca
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-SW-4:1	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-19 1/6
Date Analyzed:	06/26/19	Data File:	062615.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-SW-5:0.8	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-20 1/6
Date Analyzed:	06/26/19	Data File:	062617.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-SW-6:0.5	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-21 1/6
Date Analyzed:	06/26/19	Data File:	062618.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-SW-7:0.5	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-22 1/6
Date Analyzed:	06/26/19	Data File:	062619.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-SW-8:0.4	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-23 1/6
Date Analyzed:	06/26/19	Data File:	062620.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.014

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-SW-9:1	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-24 1/6
Date Analyzed:	06/26/19	Data File:	062621.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-B-1:1.5	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-25 1/6
Date Analyzed:	06/26/19	Data File:	062622.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-B-2:1.5	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-27 1/6
Date Analyzed:	06/26/19	Data File:	062623.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-B-3:1.5	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-29 1/6
Date Analyzed:	06/25/19	Data File:	062537.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01 ca
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.031
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01 ca
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-23	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-31 1/6
Date Analyzed:	06/26/19	Data File:	062624.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	20	121
DBC	96	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.015

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-24	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-32 1/6
Date Analyzed:	06/26/19	Data File:	062625.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	20	121
DBC	95	18	174

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-B-4:2.3	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-33 1/6
Date Analyzed:	06/25/19	Data File:	062531.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-B-5:2.3	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-35 1/6
Date Analyzed:	06/25/19	Data File:	062552.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	105	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-B-6:2.3	Client:	Environmental Partners
Date Received:	06/24/19	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	906474-37 1/6
Date Analyzed:	06/26/19	Data File:	062553.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	09-1485 mb 1/6
Date Analyzed:	06/26/19	Data File:	062554.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	91	50	150
DBC	111	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906474
Date Extracted:	06/25/19	Lab ID:	09-1486 mb 1/6
Date Analyzed:	06/25/19	Data File:	062527.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	97	50	150
DBC	109	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01 ca
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01 ca
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/03/19

Date Received: 06/24/19

Project: Brookdale 74001.1, F&BI 906474

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906474-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.32	218 b	104 b	45-130	71 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	110	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/03/19

Date Received: 06/24/19

Project: Brookdale 74001.1, F&BI 906474

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR ORGANOCHLORINE PESTICIDES BY EPA METHOD 8081B

Laboratory Code: 906474-33 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	<0.01	88	91	45-111	3
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	<0.01	91	94	50-117	3
beta-BHC	mg/kg (ppm)	0.1	<0.01	91	94	49-109	3
delta-BHC	mg/kg (ppm)	0.1	<0.01	89	92	39-114	3
Heptachlor	mg/kg (ppm)	0.1	<0.01	94	97	40-131	3
Aldrin	mg/kg (ppm)	0.1	<0.01	94	96	44-121	2
Heptachlor Epoxide	mg/kg (ppm)	0.1	<0.01	92	93	46-122	1
trans-Chlordane	mg/kg (ppm)	0.1	<0.01	91	91	41-129	0
cis-Chlordane	mg/kg (ppm)	0.1	<0.01	98	98	44-120	0
4,4'-DDE	mg/kg (ppm)	0.1	<0.01	93	95	50-150	2
Endosulfan I	mg/kg (ppm)	0.1	<0.01	91	92	45-124	1
Dieldrin	mg/kg (ppm)	0.1	<0.01	92	95	45-130	3
Endrin	mg/kg (ppm)	0.1	<0.01	107	109	50-140	2
4,4'-DDD	mg/kg (ppm)	0.1	<0.01	97	100	26-155	3
Endosulfan II	mg/kg (ppm)	0.1	<0.01	85	87	40-135	2
4,4'-DDT	mg/kg (ppm)	0.1	<0.01	97	98	50-150	1
Endrin Aldehyde	mg/kg (ppm)	0.1	<0.01	91	93	35-139	2
Methoxychlor	mg/kg (ppm)	0.1	<0.01	118	119	28-162	1
Endosulfan Sulfate	mg/kg (ppm)	0.1	<0.01	93	95	40-141	2
Endrin Ketone	mg/kg (ppm)	0.1	<0.01	92	94	41-147	2
Toxaphene	mg/kg (ppm)	4	<1	86	74	50-150	15

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/03/19

Date Received: 06/24/19

Project: Brookdale 74001.1, F&BI 906474

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
alpha-BHC	mg/kg (ppm)	0.1	104	56-113
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	108	58-120
beta-BHC	mg/kg (ppm)	0.1	108	70-130
delta-BHC	mg/kg (ppm)	0.1	111	70-130
Heptachlor	mg/kg (ppm)	0.1	108	56-124
Aldrin	mg/kg (ppm)	0.1	108	70-130
Heptachlor Epoxide	mg/kg (ppm)	0.1	107	70-130
trans-Chlordane	mg/kg (ppm)	0.1	108	60-123
cis-Chlordane	mg/kg (ppm)	0.1	112	70-130
4,4'-DDE	mg/kg (ppm)	0.1	107	70-130
Endosulfan I	mg/kg (ppm)	0.1	105	62-124
Dieldrin	mg/kg (ppm)	0.1	107	70-130
Endrin	mg/kg (ppm)	0.1	121	56-147
4,4'-DDD	mg/kg (ppm)	0.1	112	54-137
Endosulfan II	mg/kg (ppm)	0.1	100	42-140
4,4'-DDT	mg/kg (ppm)	0.1	111	25-169
Endrin Aldehyde	mg/kg (ppm)	0.1	109	21-135
Methoxychlor	mg/kg (ppm)	0.1	117	54-154
Endosulfan Sulfate	mg/kg (ppm)	0.1	108	39-148
Endrin Ketone	mg/kg (ppm)	0.1	106	46-134
Toxaphene	mg/kg (ppm)	4	92	56-145

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

906474

SAMPLE CHAIN OF CUSTODY ME 06/24/19

Box 4

Page # 1 of 4

Report To Thom Morin, Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email thom@epi-wa.com

betsy@epi-wa.com

SAMPLERS (signature) Rebecca Becerra

PROJECT NAME

REMARKS Brookdale

PO #

INVOICE TO 74001.1

USA

TURNAROUND TIME

☐ Standard Turnaround

☒ RUSH 1 week

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other _____

ANALYSES REQUESTED

						ANALYSES REQUESTED								Notes	
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM Method 8081-Dieldrin Method 8081-Full Suite			
A01-11-B-8:2	01	6/24/19	0821	Soil	1								X		
A01-11-B-8:3	02		0824		1										HOLD
A01-11-B-9:1.5	03		0834		1								X		
A01-11-B-9:2.5	04		0834		1										HOLD
A01-11-B-10:1.5	05		0841		1								X		
A01-11-B-10:2.5	06		0844												HOLD
A01-11-B-11:1.5	07		0850										X		
A01-11-B-11:2.5	08		0851												HOLD
A01-11-B-12:1	09		0901										X		
A01-11-B-12:2	10		0904												HOLD

SIGNATURE

Relinquished by:

Relinquished by:

Relinquished by:

Received by:

PRINT NAME

Rebecca Becerra

Michael E. Hall

COMPANY

EP1

IZBm

DATE

6/24/19

6/24/19

TIME

0635

1

Samples received at 4:00

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

906474

SAMPLE CHAIN OF CUSTODY

ME 06/24/19

BOY 4

Report To Thom Morin; Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email thom@epi-wa.com
10 betsy@epi-wa.com

SAMPLETERS (signature)

PROJECT NAME

Brockdale

PO #

74001.1

REMARKS

INVOICE TO

Edwin
USA

TURNAROUND TIME

Standard Turnaround
RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081-Dieldrin	Method 8081-Full Suite	Notes
AOI-11-B-13:1.2	11	6/24/19	0915	Soil	1								X		HOLD
AOI-11-B-13:2.2	12		0920		1										HOLD
AOI-11-B-14:1.5	13		0927		1								X		
AOI-11-B-14:2.5	14		0937		1										HOLD
DUP-22	15		—										X		
AOI-12-SW-1:1	16		1100										X		
AOI-12-SW-2:2	17		1105										X		
AOI-12-SW-3:1.5	18		1110											X	
AOI-12-SW-4:1	19		1112										X		
AOI-12-SW-5:0.8	20		1115										X		

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by:

Rebecca Bremer

REBECA BREMER

EPI

6/24/19

6:35

Received by:

Michael Lelli

MICHAEL LELLI

FR

6/24/19

6

Relinquished by:

Received by:

Samples received at

400

3 of 4 Bay

thomasa@epi-wa.com
boetsyw@epi-wa.com

☐ Other[illegible]

906474

SAMPLE CHAIN OF CUSTODY

ME 06/24/19

4 Bay 4

Report To Thom Morin, Betsy Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email thom@epi-wa.com

betsy@epi-wa.com

SAMPLERS (signature)

Rebecca Beerna

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

Idaho USA

Page # 4 of 4

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 1 week
Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 - Dieldrin	Method 8081 - full suite		
DUP-23	31	6/21/19	—	soil	1								X			
DUP-24	32		—										X			
AOI-12-B-4:2.3	33		1246										X			HOLD
AOI-12-B-4:3.3	34		1249													
AOI-12-B-5:2.3	35		1254										X			
AOI-12-B-5:3.3	36		1256													HOLD
AOI-12-B-6:2.3	37		1257										X			
AOI-12-B-6:3.3	38		1300													HOLD

SIGNATURE

Relinquished by: Rebecca Beerna

PRINT NAME

REBECA BEERNA

COMPANY

EP1

DATE

6/21/19

TIME

16:35

Received by:

Relinquished by:

Michael E. C. C.

FRN

6/24/19

6

Received by:

Samples received at 4 °C

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 11, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 906495

Dear Mr Morin:

Included are the additional results from the testing of material submitted on June 25, 2019 from the Brookdale 74001.1, F&BI 906495 project. There are 11 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0711R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 25, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 906495 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906495-01	AOI-14-SW-1:0.5
906495-02	AOI-14-SW-2:1
906495-03	AOI-14-SW-3:1
906495-04	AOI-14-SW-4:1
906495-05	AOI-14-SW-5:0.4
906495-06	AOI-14-SW-6:0.5
906495-07	AOI-14-B-1:0.8
906495-08	AOI-14-B-1:1.8
906495-09	AOI-14-SW-7:0.5
906495-10	AOI-14-B-2:0.8
906495-11	AOI-14-SW-8:0.5
906495-12	AOI-14-B-2:1.8
906495-13	AOI-14-B-3:1.3
906495-14	AOI-14-B-3:2.3
906495-15	AOI-14-B-4:1.5
906495-16	AOI-14-B-4:2.5
906495-17	AOI-14-B-5:2
906495-18	AOI-14-B-6:0.9
906495-19	AOI-14-B-5:3
906495-20	AOI-14-B-6:1.9
906495-21	AOI-14-B-7:1.54
906495-22	AOI-14-B-7:2.5
906495-23	Dup-25
906495-24	Dup-26
906495-25	AOI-14-B-8:0.7
906495-26	AOI-14-B-8:1.7
906495-27	AOI-14-B-9:0.8
906495-28	AOI-14-B-9:1.8
906495-29	AOI-14-B-10:1.3
906495-30	AOI-14-B-11:1.3
906495-31	AOI-14-B-10:2.3
906495-32	AOI-14-B-11:2.3
906495-33	AOI-14-B-13:1
906495-34	AOI-14-B-12:2
906495-35	AOI-14-B-12:3
906495-36	AOI-14-B-13:2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906495-37	AOI-14-B-15:0.8
906495-38	Dup-27
906495-39	AOI-14-B-14:2
906495-40	AOI-14-B-14:3
906495-41	AOI-14-B-15:1.8
906495-42	AOI-14-B-16:0.5
906495-43	AOI-14-B-17:1
906495-44	AOI-14-B-16:1.5
906495-45	AOI-14-B-17:2
906495-46	AOI-14-B-18:1
906495-47	AOI-14-B-18:2
906495-48	AOI-15-SW-1:0.5
906495-49	AOI-15-SW-2:0.5
906495-50	AOI-15-SW-3:0.7
906495-51	AOI-15-SW-4:0.5
906495-52	AOI-15-SW-5:0.5
906495-53	AOI-15-SW-6:0.7
906495-54	AOI-15-SW-7:0.2
906495-55	AOI-15-B-1:1
906495-56	AOI-15-B-1:2
906495-57	AOI-15-B-2:1
906495-58	AOI-15-B-3:1
906495-59	AOI-15-B-3:2
906495-60	AOI-15-B-2:2

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-4:2.5	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	07/05/19	Lab ID:	906495-16 1/6
Date Analyzed:	07/06/19	Data File:	070613.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	110	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.056

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-5:3	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	07/05/19	Lab ID:	906495-19 1/6
Date Analyzed:	07/06/19	Data File:	070614.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	105	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.033

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-6:1.9	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	07/05/19	Lab ID:	906495-20 1/6
Date Analyzed:	07/06/19	Data File:	070615.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	105	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.13

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-7:2.5	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	07/05/19	Lab ID:	906495-22 1/6
Date Analyzed:	07/06/19	Data File:	070616.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-18:2	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	07/05/19	Lab ID:	906495-47 1/6
Date Analyzed:	07/06/19	Data File:	070617.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.096

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-2:2	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	07/05/19	Lab ID:	906495-60 1/6
Date Analyzed:	07/06/19	Data File:	070618.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	93	50	150
DBC	118	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.046

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	07/05/19	Lab ID:	09-1611 mb 1/6
Date Analyzed:	07/06/19	Data File:	070605.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	99	50	150
DBC	124	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/11/19

Date Received: 06/25/19

Project: Brookdale 74001.1, F&BI 906495

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907061-70 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	95	102	45-130	7

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	105	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

83

☐ Standard Turnaround
☒ **RUSH** 1 week
Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other _____

hetsywetepi-wa.com

						ANALYSES REQUESTED								
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM		Notes
A01-14-SW-1:0.5	01	6/24/19	0840	Soil	1									(X) per Env.
A01-14-SW-2:1	02		0850		1									
A01-14-SW-3:1	03		0900		1									
A01-14-SW-4:1	04		0910		1									
A01-14-SW-5:0.4	05		0920											
A01-14-SW-6:0.5	06		0935											
A01-14-B-1:0.8	07		0939											
A01-14-B-1:1.8	08		0945											HOLD
A01-14-SW-7:0.5	09		0950											
A01-14-B-2:0.8	10		1005											Samples received at 3:00

906495

SAMPLE CHAIN OF CUSTODY

ME 06/24/19

Page # 3 of 3

C03

Report To Thom Main; Betsy KlingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email thom@epi-wa.comBetsy Kling

SAMPLERS (signature) <u>Rebecca Beerna</u>		PO #
PROJECT NAME <u>Brookdale</u>		74001.1
REMARKS		INVOICE TO <u>Idiyo USA</u>

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround	<u>1 week</u>
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	
<input checked="" type="checkbox"/> Archive Samples	
<input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 - Dieldrin	Method 8081 - Full Suite		
A01-14-B-7:1.5	21		1056	Soil	1								X			HOLD
A01-14-B-7:2.5	22		1100		1								X			
DUP-25	23				1									X		
DUP-26	24				1								X			
A01-14-B-8:0.7	25		1103		1								X			HOLD
A01-14-B-8:1.7	26		1107		1											
A01-14-B-9:0.8	27		1119		1									X		
A01-14-B-9:1.8	28		1127		1											HOLD
A01-14-B-10:1.3	29		1132		1									X		
A01-14-B-11:1.3	30		1137		1									X		

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebecca Beerna</u>	REBECCA BEERNA	EP1	6/24/19	
Received by: <u>Michael Kelly</u>	Michael Kelly	EP1	6/25/19	0620
Relinquished by:				
Received by:		Samples received at	3	PC

3

Page # 4 of _____

TURNAROUND TIME

☐ Standard Turnaround

PO #

74001.1

INVOICE TO

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other _____

☐ Other _____[illegible]

TIME

ANNEX

8.

1

906495

SAMPLE CHAIN OF CUSTODY

NE 06/24/19

5 of 203

Report To Thom Min; Betsy WingCompany EP1Address 180 NW Maple St Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email thom@epi-wa.comBetsy Wing - wa.comSAMPLERS (signature) Rebecca Beeman

PROJECT NAME

PO #

REMARKS

Brookdale

INVOICE TO

74001.1
Idaho
USAPage # 5 of

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

TPH-HCID
TPH-Diesel
TPH-Gasoline
BTEX by 8021B
VOCs by 8260C
SVOCs by 8270D
PAHs 8270D SIM
Method 8081
Dieldrin
Method 8081
Full Site

Notes

						ANALYSES REQUESTED										Notes		
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081	Dieldrin	Method 8081		Full Suite	
A01-14-B-15:1.8	41	6/24/19	1253	Soil	1													HOLD
A01-14-B-16:0.5	42		1259		1									X				
A01-14-B-17:1	43		1303		1									X				
A01-14-B-16:1.5	44		1305		1													HOLD
A01-14-B-17:2	45		1311		1													HOLD
A01-14-B-18:1	46		1312		1									X				
A01-14-B-18:2	47		1316		1									(X)				HOLD
A01-15-SW-1:0.5	48		1400		1									X				
A01-15-SW-2:0.5	49		1405		1									X				
A01-15-SW-3:0.7	50		1412		1									X				

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: Rebecca BeemanREBECCA BEEMANEP16/24/190620Received by: Betsy WingWichita Falls7/3/19425/1150620

Relinquished by:

Samples received at:

30620

906495

SAMPLE CHAIN OF CUSTODY

ME 06/24/19

C03

Report To Thom Morin, Betsy WangCompany EP1Address 1186 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email thom@ep1-wa.combetsyw@ep1-wa.com

SAMPLERS (signature) <u>Rebecca Brecken</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS <u>Idaho USA</u>	INVOICE TO <u>Idaho USA</u>

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>1 week</u> Rush charges authorized by: _____	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____
--	--

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-15-SW-4:0.5	51	6/24/19	1416	Soil	1							<input checked="" type="checkbox"/> Method 8081-18000 <input checked="" type="checkbox"/> Method 8081-18000 <input checked="" type="checkbox"/> Method 8081-18000	
A01-15-SW-5:0.5	52		1422									<input checked="" type="checkbox"/>	
A01-15-SW-6:0.7	53		1430									<input checked="" type="checkbox"/>	
A01-15-SW-7:0.2	54		1432									<input checked="" type="checkbox"/>	
A01-15-B-1:1	55		1435									<input checked="" type="checkbox"/>	
A01-15-B-1:2	56		1441										HOLD
A01-15-B-2:1	57		1458									<input checked="" type="checkbox"/>	
A01-15-B-3:1	58		1455									<input checked="" type="checkbox"/>	
A01-15-B-3:2	59		1457									<input checked="" type="checkbox"/>	HOLD
A01-15-B-2:2	60		1459									<input checked="" type="checkbox"/>	HOLD

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>Rebecca Brecken</u>	<u>REBECCA BRECKEN</u>	<u>EP1</u>	<u>6/24/19</u>	
<u>Michael Erick</u>	<u>Michael Erick</u>	<u>FLRM</u>	<u>6/25/19</u>	<u>0870</u>
Received by:		Samples received at		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 3, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 906495

Dear Mr Morin:

Included are the results from the testing of material submitted on June 25, 2019 from the Brookdale 74001.1, F&BI 906495 project. There are 49 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0703R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 25, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 906495 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906495 -01	AOI-14-SW-1:0.5
906495 -02	AOI-14-SW-2:1
906495 -03	AOI-14-SW-3:1
906495 -04	AOI-14-SW-4:1
906495 -05	AOI-14-SW-5:0.4
906495 -06	AOI-14-SW-6:0.5
906495 -07	AOI-14-B-1:0.8
906495 -08	AOI-14-B-1:1.8
906495 -09	AOI-14-SW-7:0.5
906495 -10	AOI-14-B-2:0.8
906495 -11	AOI-14-SW-8:0.5
906495 -12	AOI-14-B-2:1.8
906495 -13	AOI-14-B-3:1.3
906495 -14	AOI-14-B-3:2.3
906495 -15	AOI-14-B-4:1.5
906495 -16	AOI-14-B-4:2.5
906495 -17	AOI-14-B-5:2
906495 -18	AOI-14-B-6:0.9
906495 -19	AOI-14-B-5:3
906495 -20	AOI-14-B-6:1.9
906495 -21	AOI-14-B-7:1.5
906495 -22	AOI-14-B-7:2.5
906495 -23	Dup-25
906495 -24	Dup-26
906495 -25	AOI-14-B-8:0.7
906495 -26	AOI-14-B-8:1.7
906495 -27	AOI-14-B-9:0.8
906495 -28	AOI-14-B-9:1.8
906495 -29	AOI-14-B-10:1.3
906495 -30	AOI-14-B-11:1.3
906495 -31	AOI-14-B-10:2.3
906495 -32	AOI-14-B-11:2.3
906495 -33	AOI-14-B-13:1
906495 -34	AOI-14-B-12:2
906495 -35	AOI-14-B-12:3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (Continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906495 -36	AOI-14-B-13:2
906495 -37	AOI-14-B-15:0.8
906495 -38	Dup-27
906495 -39	AOI-14-B-14:2
906495 -40	AOI-14-B-14:3
906495 -41	AOI-14-B-15:1.8
906495 -42	AOI-14-B-16:0.5
906495 -43	AOI-14-B-17:1
906495 -44	AOI-14-B-16:1.5
906495 -45	AOI-14-B-17:2
906495 -46	AOI-14-B-18:1
906495 -47	AOI-14-B-18:2
906495 -48	AOI-15-SW-1:0.5
906495 -49	AOI-15-SW-2:0.5
906495 -50	AOI-15-SW-3:0.7
906495 -51	AOI-15-SW-4:0.5
906495 -52	AOI-15-SW-5:0.5
906495 -53	AOI-15-SW-6:0.7
906495 -54	AOI-15-SW-7:0.2
906495 -55	AOI-15-B-1:1
906495 -56	AOI-15-B-1:2
906495 -57	AOI-15-B-2:1
906495 -58	AOI-15-B-3:1
906495 -59	AOI-15-B-3:2
906495 -60	AOI-15-B-2:2

The 8081B calibration standard failed the acceptance criteria for several analytes. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-1:0.5	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-01 1/6
Date Analyzed:	06/26/19	Data File:	062637.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	56	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-2:1	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-02 1/6
Date Analyzed:	06/26/19	Data File:	062638.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-3:1	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-03 1/6
Date Analyzed:	06/26/19	Data File:	062639.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-4:1	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-04 1/6
Date Analyzed:	06/26/19	Data File:	062640.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-5:0.4	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-05 1/6
Date Analyzed:	06/26/19	Data File:	062641.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.031

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-6:0.5	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-06 1/6
Date Analyzed:	06/26/19	Data File:	062642.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.089

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-1:0.8	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-07 1/6
Date Analyzed:	06/26/19	Data File:	062643.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-7:0.5	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-09 1/6
Date Analyzed:	06/26/19	Data File:	062644.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-2:0.8	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-10 1/6
Date Analyzed:	06/26/19	Data File:	062645.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-8:0.5	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-11 1/6
Date Analyzed:	06/26/19	Data File:	062646.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	70	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-3:1.3	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-13 1/6
Date Analyzed:	06/26/19	Data File:	062647.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-4:1.5	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-15 1/6
Date Analyzed:	06/26/19	Data File:	062648.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.044

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-5:2	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/25/19	Lab ID:	906495-17 1/6
Date Analyzed:	06/25/19	Data File:	062545.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01 ca
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.073
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01 ca
Toxaphene	<1 ca

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-6:0.9	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/25/19	Lab ID:	906495-18 1/6
Date Analyzed:	06/25/19	Data File:	062546.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.015
Heptachlor	<0.01 ca
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.33
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01 ca
Toxaphene	<1 ca

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-7:1.5	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-21 1/6
Date Analyzed:	06/26/19	Data File:	062649.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.094

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-25	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/25/19	Lab ID:	906495-23 1/6
Date Analyzed:	06/25/19	Data File:	062547.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.34
Heptachlor	<0.01 ca
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.085
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01 ca
Toxaphene	<1 ca

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-26	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-24 1/6
Date Analyzed:	06/26/19	Data File:	062651.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.072

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-8:0.7	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-25 1/6
Date Analyzed:	06/26/19	Data File:	062652.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-9:0.8	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-27 1/6
Date Analyzed:	06/26/19	Data File:	062653.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.038

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-10:1.3	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-29 1/6
Date Analyzed:	06/27/19	Data File:	062654.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.035

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-11:1.3	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-30 1/6
Date Analyzed:	06/27/19	Data File:	062655.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.055

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-13:1	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-33 1/6
Date Analyzed:	06/27/19	Data File:	062655A.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.014

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-12:2	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-34 1/6
Date Analyzed:	06/27/19	Data File:	062656.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.042

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-15:0.8	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-37 1/6
Date Analyzed:	06/27/19	Data File:	062716.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-27	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-38 1/6
Date Analyzed:	06/27/19	Data File:	062719.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.049

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-14:2	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-39 1/6
Date Analyzed:	06/27/19	Data File:	062720.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-16:0.5	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-42 1/6
Date Analyzed:	06/27/19	Data File:	062721.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.057

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-17:1	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-43 1/6
Date Analyzed:	06/27/19	Data File:	062722.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-18:1	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-46 1/6
Date Analyzed:	06/27/19	Data File:	062723.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.098

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-1:0.5	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-48 1/6
Date Analyzed:	06/27/19	Data File:	062724.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.16

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-2:0.5	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-49 1/6
Date Analyzed:	06/27/19	Data File:	062725.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.024

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-3:0.7	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-50 1/60
Date Analyzed:	06/29/19	Data File:	062859.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79 d	50	150
DBC	96 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.74

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-4:0.5	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-51 1/6
Date Analyzed:	06/27/19	Data File:	062727.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-5:0.5	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-52 1/6
Date Analyzed:	06/27/19	Data File:	062728.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-6:0.7	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-53 1/6
Date Analyzed:	06/28/19	Data File:	062762.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.21

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-7:0.2	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-54 1/60
Date Analyzed:	06/29/19	Data File:	062861.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78 d	50	150
DBC	102 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-1:1	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-55 1/6
Date Analyzed:	06/28/19	Data File:	062764.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.029

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-2:1	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-57 1/6
Date Analyzed:	06/28/19	Data File:	062765.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.072

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-3:1	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	906495-58 1/6
Date Analyzed:	06/28/19	Data File:	062766.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.050

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/25/19	Lab ID:	09-1486 mb 1/6
Date Analyzed:	06/25/19	Data File:	062527.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	97	50	150
DBC	109	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01 ca
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01 ca
Toxaphene	<1 ca

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	09-1534 mb 1/6
Date Analyzed:	06/26/19	Data File:	062633.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906495
Date Extracted:	06/26/19	Lab ID:	09-1535 mb 1/6
Date Analyzed:	06/27/19	Data File:	062715.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/03/19

Date Received: 06/25/19

Project: Brookdale 74001.1, F&BI 906495

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906474-33 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	<0.01	88	91	45-111	3
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	<0.01	91	94	50-117	3
beta-BHC	mg/kg (ppm)	0.1	<0.01	91	94	49-109	3
delta-BHC	mg/kg (ppm)	0.1	<0.01	89	92	39-114	3
Heptachlor	mg/kg (ppm)	0.1	<0.01	94	97	40-131	3
Aldrin	mg/kg (ppm)	0.1	<0.01	94	96	44-121	2
Heptachlor Epoxide	mg/kg (ppm)	0.1	<0.01	92	93	46-122	1
trans-Chlordane	mg/kg (ppm)	0.1	<0.01	91	91	41-129	0
cis-Chlordane	mg/kg (ppm)	0.1	<0.01	98	98	44-120	0
4,4'-DDE	mg/kg (ppm)	0.1	<0.01	93	95	50-150	2
Endosulfan I	mg/kg (ppm)	0.1	<0.01	91	92	45-124	1
Dieldrin	mg/kg (ppm)	0.1	<0.01	92	95	45-130	3
Endrin	mg/kg (ppm)	0.1	<0.01	107	109	50-140	2
4,4'-DDD	mg/kg (ppm)	0.1	<0.01	97	100	26-155	3
Endosulfan II	mg/kg (ppm)	0.1	<0.01	85	87	40-135	2
4,4'-DDT	mg/kg (ppm)	0.1	<0.01	97	98	50-150	1
Endrin Aldehyde	mg/kg (ppm)	0.1	<0.01	91	93	35-139	2
Methoxychlor	mg/kg (ppm)	0.1	<0.01	118	119	28-162	1
Endosulfan Sulfate	mg/kg (ppm)	0.1	<0.01	93	95	40-141	2
Endrin Ketone	mg/kg (ppm)	0.1	<0.01	92	94	41-147	2
Toxaphene	mg/kg (ppm)	4	<1	86	74	50-150	15

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/03/19

Date Received: 06/25/19

Project: Brookdale 74001.1, F&BI 906495

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
alpha-BHC	mg/kg (ppm)	0.1	104	56-113
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	108	58-120
beta-BHC	mg/kg (ppm)	0.1	108	70-130
delta-BHC	mg/kg (ppm)	0.1	111	70-130
Heptachlor	mg/kg (ppm)	0.1	108	56-124
Aldrin	mg/kg (ppm)	0.1	108	70-130
Heptachlor Epoxide	mg/kg (ppm)	0.1	107	70-130
trans-Chlordane	mg/kg (ppm)	0.1	108	60-123
cis-Chlordane	mg/kg (ppm)	0.1	112	70-130
4,4'-DDE	mg/kg (ppm)	0.1	107	70-130
Endosulfan I	mg/kg (ppm)	0.1	105	62-124
Dieldrin	mg/kg (ppm)	0.1	107	70-130
Endrin	mg/kg (ppm)	0.1	121	56-147
4,4'-DDD	mg/kg (ppm)	0.1	112	54-137
Endosulfan II	mg/kg (ppm)	0.1	100	42-140
4,4'-DDT	mg/kg (ppm)	0.1	111	25-169
Endrin Aldehyde	mg/kg (ppm)	0.1	109	21-135
Methoxychlor	mg/kg (ppm)	0.1	117	54-154
Endosulfan Sulfate	mg/kg (ppm)	0.1	108	39-148
Endrin Ketone	mg/kg (ppm)	0.1	106	46-134
Toxaphene	mg/kg (ppm)	4	92	56-145

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/03/19

Date Received: 06/25/19

Project: Brookdale 74001.1, F&BI 906495

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906495-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	81	85	45-130	5

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	94	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/03/19

Date Received: 06/25/19

Project: Brookdale 74001.1, F&BI 906495

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906495-37 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	88	88	45-130	0

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

906495

SAMPLE CHAIN OF CUSTODY

ME 06/25/19

C03

Report To Thom Morin; Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email thom@epi-wa.combetsy@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

Invoice to
Idiyo
USAPage # 1 of 1

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 1 week
Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-14-SW-1:0.5	01	6/24/19	0840	Soil	1								
A01-14-SW-2:1	02		0850										
A01-14-SW-3:1	03		0900										
A01-14-SW-4:1	04		0910										
A01-14-SW-5:0.4	05		0920										
A01-14-SW-6:0.5	06		0935										
A01-14-B-1:0.8	07		0939										
A01-14-B-1:1.8	08		0945										
A01-14-SW-7:0.5	09		0950										
A01-14-B-2:0.8	10		1005										

Samples received at 3 °C

HOLD

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by:

Received by:

Rebecca BeerraREBEKA BEERRA

Relinquished by:

Michael AllenEP16/24/190620

Received by:

Samples received at _____ °C

906495

SAMPLE CHAIN OF CUSTODY

ME 06/24/19

Page # 3 of 3

C03

Report To Thom Maxim, Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email thommax@epi-wa.combetsyw@epi-wa.com

SAMPLERS (signature) <u>Rebecca Becerra</u>		PO #
PROJECT NAME <u>Brookdale</u>		INVOICE TO <u>Idiyo USA</u>
REMARKS		

TURNAROUND TIME
<input type="checkbox"/> Standard Turnaround
<input checked="" type="checkbox"/> RUSH <u>1 week</u>
Rush charges authorized by:
SAMPLE DISPOSAL
<input type="checkbox"/> Dispose after 30 days
<input checked="" type="checkbox"/> Archive Samples
<input type="checkbox"/> Other

ANALYSES REQUESTED					
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars
A01-14-B-7:1.5	21		1056	Soil	1
A01-14-B-7:2.5	22		1100		1
DUP-25	23		—		1
DUP-26	24		—		1
A01-14-B-8:0.7	25		1103		1
A01-14-B-8:1.7	26		1107		1
A01-14-B-9:0.8	27		1119		1
A01-14-B-9:1.8	28		1127		1
A01-14-B-10:1.3	29		1132		1
A01-14-B-11:1.3	30		1137		1

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebecca Becerra</u>	REBECA BECERRA	EP1	6/24/19	
Received by: <u>Michael E. Allen</u>	Michael E. Allen	EP1	6/25/19	0620
Relinquished by:				
Received by:		Samples received at	3	0620

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

906495

SAMPLE CHAIN OF CUSTODY

ME 06/24/19 4 003

Report To Thom Marin; Betsy Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email thommarin@epi-wa.com

betsyw@epi-wa.com

SAMPLERS (signature) <u>Rubea Becerra</u>		PO # <u>14001.1</u>
PROJECT NAME <u>Brookdale</u>	INVOICE TO <u>Ichigo USA</u>	
REMARKS		

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>1 week</u> Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other
--	--

						ANALYSES REQUESTED										
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 Dieldrin	Method 8081 Full Suite	Notes	
A01-14-B-10:2.3	31	6/24/19	11:39	Soil	1										HOLD	
A01-14-B-11:2.3	32		11:43												HOLD	
A01-14-B-13:1	33		11:59									X				
A01-14-B-12:2	34		12:02									X				
A01-14-B-12:3	35		12:06												HOLD	
A01-14-B-13:2	36		12:07												HOLD	
A01-14-B-15:0.8	37		12:40									X				
DOO-27	38		—									X				
A01-14-B-14:2	39		12:44									X				
A01-14-B-14:3	40		12:50												HOLD	

SIGNATURE		PRINT NAME		COMPANY	DATE	TIME
Relinquished by: <u>Rubea Becerra</u>		<u>RUBEA BECERRA</u>		<u>EP1</u>	<u>6/24/19</u>	
Received by: <u>Michael E. Allen</u>		<u>Michael E. Allen</u>		<u>T&R</u>	<u>6/25/19</u>	<u>08:00</u>
Relinquished by:						
Received by:				Samples received at	<u>3:00</u>	

Friedman & Bruja, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

906495

SAMPLE CHAIN OF CUSTODY

ME 06/24/19

Page # 5 of 5

CO3

Report To Thom Min, Betsy Wing

Company EPI

Address 180 NW Maple St Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email thommin@epi-wa.com

Betsy Wing - wa.com

SAMPLERS (signature) <u>Rebecca Breann</u>	
PROJECT NAME	PO #
<u>Proxale</u>	<u>74001.1</u>
REMARKS	INVOICE TO
	<u>Idrio USA</u>

TURNAROUND TIME	SAMPLE DISPOSAL
<input type="checkbox"/> Standard Turnaround	<input type="checkbox"/> Dispose after 30 days
<input checked="" type="checkbox"/> RUSH <u>1 week</u>	<input checked="" type="checkbox"/> Archive Samples
Rush charges authorized by:	

ANALYSES REQUESTED						ANALYSES REQUESTED												
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081	Diieldrin	Method 8081	Full Suite	Notes	
A01-14-B-15:1.8	41	6/24/19	1253	Soil	1													HOLD
A01-14-B-16:0.5	42		1259										X					
A01-14-B-17:1	43		1303										X					
A01-14-B-16:1.5	44		1305															HOLD
A01-14-B-17:2	45		1311															HOLD
A01-14-B-18:1	46		1312										X					
A01-14-B-18:2	47		1316															HOLD
A01-15-SW-1:0.5	48		1400										X					
A01-15-SW-2:0.5	49		1405										X					
A01-15-SW-3:0.7	50		1412										X					

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>Rebecca Breann</u>		<u>REBECCA BREANN</u>		<u>EPI</u>		<u>6/24/19</u>			
Received by: <u>Michael</u>		<u>Michael</u>		<u>TRN</u>		<u>6/25/19</u>		<u>0620</u>	
Relinquished by:									
Received by:				Samples received at:		<u>3</u>			

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

906495

SAMPLE CHAIN OF CUSTODY

ME 06/24/19

C03

Report To Thom Morin, Betty WangCompany EP1Address 1188 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email thomm@ep1-wa.comextsyw@ep1-wa.comPage # 6 of 6

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 1 week
 Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

SAMPLERS (signature)

PROJECT NAME

REMARKS

Rebecca Beebe
 PO # 74001.1
 INVOICE TO IdiJo USA
Brookdale

ANALYSES REQUESTED

 TPH-HCID
 TPH-Diesel
 TPH-Gasoline
 BTEX by 8021B
 VOCs by 8260C
 SVOCs by 8270D
 PAHs 8270D SIM

Notes

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-15-SW-4:0.5	51	6/24/19	1416	Soil	1								
A01-15-SW-5:0.5	52		1422										
A01-15-SW-6:0.7	53		1430										
A01-15-SW-7:0.2	54		1432										
A01-15-B-1:1	55		1435										
A01-15-B-1:2	56		1441										
A01-15-B-2:1	57		1458										
A01-15-B-3:1	58		1450										
A01-15-B-3:2	59		1457										
A01-15-B-2:2	60		1459										

SIGNATURE

PRINT NAME

COMPANY

DATE TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: Albert BeebeREBECCA BEEBEEP16/24/19Received by: Michael LeeMichael LeeEP16/27/19

Relinquished by:

Samples received at

3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 11, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 906520

Dear Mr Morin:

Included are the additional results from the testing of material submitted on June 25, 2019 from the Brookdale 74001.1, F&BI 906520 project. There are 8 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0711R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 25, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 906520 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906520 -01	AOI-15-B-9:2.5
906520 -02	AOI-15-B-8:2
906520 -03	AOI-15-B-8:3
906520 -04	AOI-15-B-12:1.5
906520 -05	AOI-15-B-12:2.5
906520 -06	AOI-15-B-10:1
906520 -07	AOI-15-B-10:2
906520 -08	AOI-15-B-11:2
906520 -09	AOI-15-B-11:3
906520 -10	AOI-15-B-14:1.0
906520 -11	AOI-15-B-4:1
906520 -12	AOI-15-B-5:1
906520 -13	DUP-28
906520 -14	AOI-15-B-5:2
906520 -15	AOI-15-B-4:2
906520 -16	AOI-15-B-6:1.5
906520 -17	AOI-15-B-6:2.5
906520 -18	AOI-15-B-7:1.5
906520 -19	AOI-15-B-7:2.5
906520 -20	AOI-15-B-9:1.5
906520 -21	AOI-15-B-14:2.0
906520 -22	AOI-15-B-13:1
906520 -23	AOI-15-B-13:2
906520 -24	AOI-13-SW-1:0.6
906520 -25	AOI-13-SW-2:0.9
906520 -26	DUP-29
906520 -27	AOI-13-SW-3:0.7
906520 -28	AOI-13-B-1:1
906520 -29	AOI-13-B-1:2
906520 -30	AOI-13-SW-4:0.9
906520 -31	AOI-13-SW-5:0.6
906520 -32	AOI-13-B-2:1
906520 -33	AOI-13-B-2:2
906520 -34	AOI-13-SW-6:1
906520 -35	AOI-13-B-3:2
906520 -36	AOI-13-B-3:3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906520 -37	AOI-13-B-4:1.5
906520 -38	AOI-13-B-4:2.5
906520 -39	AOI-13-B-5:1
906520 -40	AOI-13-B-5:2
906520 -41	AOI-13-B-8:1.5
906520 -42	AOI-13-B-8:2.5
906520 -43	AOI-13-B-6:1.5
906520 -44	AOI-13-B-6:2.5
906520 -45	AOI-13-B-7:1.0
906520 -46	AOI-13-B-7:2.0
906520 -47	AOI-16-SW-1:0.7
906520 -48	AOI-16-SW-2:0.9
906520 -49	AOI-16-SW-3:2.0
906520 -50	AOI-16-SW-4:1.0
906520 -51	AOI-16-SW-6:0.11
906520 -52	AOI-16-SW-5:0.7

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-9:2.5	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1
Date Extracted:	07/05/19	Lab ID:	906520-01 1/6
Date Analyzed:	07/06/19	Data File:	070620.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	108	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.28

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-4:2	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1
Date Extracted:	07/05/19	Lab ID:	906520-15 1/6
Date Analyzed:	07/06/19	Data File:	070621.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	110	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.012

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-6:2.5	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1
Date Extracted:	07/05/19	Lab ID:	906520-17 1/6
Date Analyzed:	07/06/19	Data File:	070622.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	106	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.040

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1
Date Extracted:	07/05/19	Lab ID:	09-1611 mb 1/6
Date Analyzed:	07/06/19	Data File:	070605.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	99	50	150
DBC	124	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/11/19

Date Received: 06/25/19

Project: Brookdale 74001.1, F&BI 906520

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907061-70 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	95	102	45-130	7

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	105	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

906520

SAMPLE CHAIN OF CUSTODY

ME 06/25/19

COS

Page # 1 of 1

Report To Thom Morin, Betsy WingCompany EP1Address 1180 NW Maple St, Suite 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email thom@epi-ua.com
betsy@epi-ua.com

SAMPLERS (signature) <u>Betsy Wing</u>		PO #
PROJECT/NAME <u>Brookdale</u>		74001.1
REMARKS	INVOICE TO <u>14100 USA</u>	
TURNOAROUND TIME <input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH <u>1 week / 5-day</u> Rush charges authorized by:		
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Archive Samples <input type="checkbox"/> Other		

data.mh.com						ANALYSES REQUESTED									
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM			
A01-15-B-9:25	01	6/25/19	0924	Soil	1							<input checked="" type="checkbox"/> Method 8081 - p-ndia only Method 8081 - Full Suit			
A01-15-B-8:2	02		0921												
A01-15-B-8:3	03		0927												
A01-15-B-10:15	04		0936												
A01-15-B-10:25	05		0940												
A01-15-B-10:1	06		0939												
A01-15-B-10:2	07		0945												
A01-15-B-11:2	08		0955												
A01-15-B-11:3	09		1001												
A01-15-B-14:1.0	10		0958												
<div>Method 8081 - p-ndia only Method 8081 - Full Suit</div>															
<div>Notes</div>															

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: <u>Betsy Wing</u>	PRINT NAME <u>Betsy Wing</u>	COMPANY <u>EP1</u>	DATE <u>6/25/19</u>	TIME <u>1643</u>
Received by: <u>Betsy Wing</u>	PRINT NAME <u>Betsy Wing</u>	COMPANY <u>EP1</u>	DATE <u>6/25/19</u>	TIME <u>1643</u>
Relinquished by:				
Received by:				

966520

SAMPLE CHAIN OF CUSTODY

ME 06/25/19

COS

Report To Thom Morin, Betty WingCompany EP1Address 1180 NW Maple St, Suite 310City, State, ZIP Issaquah, WA 98027Phone (425) 385-1010 Email thom@epi-wa.com
betty@epi-wa.comSAMPLERS (signature)
Betty Wing
PROJECT NAME

PO #

Brookdale74001.1

REMARKS

INVOICE TO

1chigo USAPage # (06)12 of 16
TURNAROUND TIME☐ Standard Turnaround
☐ RUSH 1 week / 5 day
Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☐ Archive Samples
☐ Other

ANALYSES REQUESTED

TPH-HCID
TPH-Diesel
TPH-Gasoline
BTEX by 8021B
VOCs by 8260C
SVOCs by 8270D
PAHs 8270D SIM
method 8081-
Prediction only
method 8081-
Full suite

Notes

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081- Prediction only	method 8081- Full suite	Notes
A01-15-B-4:1	11	6/25/19	0843	soil	1							X			
A01-15-B-5:1	12		0844									X			
Dup-28	13											X			
A01-15-B-5:2	14		0850												hold
A01-15-B-4:2	15		0853									X			hold
A01-15-B-6:1.5	16		0900									X			hold
A01-15-B-6:2.5	17		0904									X			hold
A01-15-B-7:1.5	18		0903									X			
A01-15-B-7:2.5	19		0909												hold
A01-15-B-9:1.5	20		0918									X			

SIGNATURE

PRINT NAME

COMPANY

DATE TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Received by:

Betty WingBetty WingEP16/25/19 10:43

Received by:

123456PiscatawayFB16/25/19 16:43

Relinquished by:

2:00

Received by:

906520

Betsy

SAMPLE CHAIN OF CUSTODY ME 06/25/19

COS

Page # 3 of 6

Report To: Thomas Morin, Site Wing

Company: EPI

Address: 1180 NW Maple St, Suite 310

City, State, ZIP: Issaquah, WA 98027

Phone: (425) 395-0010 Email: thomasm@epi-wa.com

Betsy@epi-wa.com

SUPPLIERS (Signature) PROJECT NAME: Brookdale		PO # 74001.1
REMARKS		INVOICE TO Epi WA
TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH 1 week / 5 day Rush charges authorized by:		
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Archive Samples <input type="checkbox"/> Other		

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-15-B-14:2.0	21	6/25/19	1004	Soil	11								Hold
A01-15-B-13:1	22		1009										4.3/6/25/19
A01-15-B-13:2	23		1017										Hold B-13:1
A01-13-SW-1:0.6	24		1118										
A01-13-SW-2:0.9	25		1126										ME 6/25/19
A01-13-SW-3:0.9			1134										
DUP-29	26												
A01-13-SW-3:0.7	27		1142										
A01-13-B-1:1	28		1129										
A01-13-B-1:2	29		1139										Hold

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: Betsy	Relinquished by: Betsy	Relinquished by: Betsy	Relinquished by: Betsy
Received by: Betsy	Received by: Betsy	Received by: Betsy	Received by: Betsy
Relinquished by: Betsy	Relinquished by: Betsy	Relinquished by: Betsy	Relinquished by: Betsy
Received by: Betsy	Received by: Betsy	Received by: Betsy	Received by: Betsy

906520

SAMPLE CHAIN OF CUSTODY

ME 06/25/19

COS

Page # 4 of 10

Report To Thom Monn, Betsy WingCompany EPIAddress 1180 NW Maple St, Suite 310City, State, ZIP Issaquah, WA 98027Phone 425-345-0900 Email thom.mon@epi-wa.combetsy.wing@epi-wa.com

SAMPLES (signature) <u>Betsy Wing</u>	
PROJECT NAME <u>Brockdale</u>	PO # <u>14001.1</u>
REMARKS	INVOICE TO <u>Idip USA</u>

<input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH <u>1 week TAT</u> Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Archive Samples <input type="checkbox"/> Other
--	---

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-13-SW-4:0.9	30	6/25/19	1150	soil	1							Method 8081 - Preliminary only Method 8081 - Full suite	X
A01-13-SW-5:0.6	31		1158										X
A01-13-B-2:1	32		1149										Y
A01-13-B-2:2	33		1155										
A01-13-SW-6:1	34		1244										X
A01-13-B-3:2	35		1243										X
A01-13-B-3:3	36		1249										
A01-13-B-4:1S	37		1252										X
A01-13-B-4:2.5	38		1304										X
A01-13-B-5:1	39		1259										X

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: <u>Betsy Wing</u>	PRINT NAME	COMPANY	DATE	TIME
Received by: <u>Betsy Wing</u>				
Relinquished by: <u>Betsy Wing</u>				
Received by: <u>Betsy Wing</u>				

Samples received at 2 °C

906520

SAMPLE CHAIN OF CUSTODY ME 06/25/19

Page # 5 of 10

Report To Thom Main, Betsy KingCompany EPIAddress 1180 NW Maple St, Suite 310City, State, ZIP Issaquah, WA 98027Phone 206-345-0010 Email thom@epi-wa.com
betsy@epi-wa.comSAMPLERS (signature)
Betsy King

PROJECT NAME

PO #

Brookdale71001-1

REMARKS

INVOICE TO

Idigo USA

TURNAROUND TIME

☐ Standard Turnaround☐ RUSH 1 week TAT

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Archive Samples☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8061 - Oils/Grease only	Method 8061 - Full Suite	Notes
A01-13-B-5:2	40	6/25/19	1309	501	1								X		HOLD
A01-13-B-8:1.5	41		1322										X		HOLD
A01-13-B-8:2.5	42		1330										X		HOLD
A01-13-B-6:1.5	43		1325										X		HOLD
A01-13-B-6:2.5	44		1337										X		HOLD
A01-13-B-7:1.0	45		1346										X		HOLD
A01-13-B-7:2.0	46		1354										X		HOLD
A01-16-SW-1:0.7	47		1444										X		
A01-16-SW-2:0.9	48		1448										X		
A01-16-SW-3:2.0	49		1452										X		

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: Betsy KingBetsy KingEPI

6/25/19

11043

Received by: [Signature]Betsy KingEPI

6/25/19

1643

Relinquished by:

Betsy KingEPI

6/25/19

1643

Received by:

Betsy KingEPI

6/25/19

1643

SAMPLE CHAIN OF CUSTODY

ME 06/25/19

Page # 2 of 11

TURNAROUND TIME

☐ Standard Turnaround
☐ RUSH 1 week 7/11
Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30
☐ Archive Samples
☐ Other _____

SAMPLERS (signature)
PROJECT NAME

PO #

Brookdale

74001-1

REMARKS

Tehijo USA

Report To Thon Man; Betsywing

Company 1180 Alh Place St, Suite 310

Address Issaquah, WA 98027

City, State, ZIP ERT

Phone 425-375-0010 Email john@open-uh.com

shu-ni-de-ni-un-car
be-tsi-jun-choi-tun-car

ANALYSES REQUESTED

[illegible]

Friedman & Brya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

PRINT NAME

COMPANY

DATE _____

TIME

Reformulated by:
Robert J. Hine

Beta Wine

18

10/25/11

11043

Received by: -

DISK ADDRESS

十

6/25/

1673

Relinquished by

Sammler received

Received by:

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 3, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 906520

Dear Mr Morin:

Included are the results from the testing of material submitted on June 25, 2019 from the Brookdale 74001.1, F&BI 906520 project. There are 43 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0703R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 25, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 906520 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906520 -01	AOI-15-B-9:2.5
906520 -02	AOI-15-B-8:2
906520 -03	AOI-15-B-8:3
906520 -04	AOI-15-B-12:1.5
906520 -05	AOI-15-B-12:2.5
906520 -06	AOI-15-B-10:1
906520 -07	AOI-15-B-10:2
906520 -08	AOI-15-B-11:2
906520 -09	AOI-15-B-11:3
906520 -10	AOI-15-B-14:1.0
906520 -11	AOI-15-B-4:1
906520 -12	AOI-15-B-5:1
906520 -13	DUP-28
906520 -14	AOI-15-B-5:2
906520 -15	AOI-15-B-4:2
906520 -16	AOI-15-B-6:1.5
906520 -17	AOI-15-B-6:2.5
906520 -18	AOI-15-B-7:1.5
906520 -19	AOI-15-B-7:2.5
906520 -20	AOI-15-B-9:1.5
906520 -21	AOI-15-B-14:2.0
906520 -22	AOI-15-B-13:1
906520 -23	AOI-15-B-13:2
906520 -24	AOI-13-SW-1:0.6
906520 -25	AOI-13-SW-2:0.9
906520 -26	DUP-29
906520 -27	AOI-13-SW-3:0.7
906520 -28	AOI-13-B-1:1
906520 -29	AOI-13-B-1:2
906520 -30	AOI-13-SW-4:0.9
906520 -31	AOI-13-SW-5:0.6
906520 -32	AOI-13-B-2:1
906520 -33	AOI-13-B-2:2
906520 -34	AOI-13-SW-6:1
906520 -35	AOI-13-B-3:2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (Continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906520 -36	AOI-13-B-3:3
906520 -37	AOI-13-B-4:1.5
906520 -38	AOI-13-B-4:2.5
906520 -39	AOI-13-B-5:1
906520 -40	AOI-13-B-5:2
906520 -41	AOI-13-B-8:1.5
906520 -42	AOI-13-B-8:2.5
906520 -43	AOI-13-B-6:1.5
906520 -44	AOI-13-B-6:2.5
906520 -45	AOI-13-B-7:1.0
906520 -46	AOI-13-B-7:2.0
906520 -47	AOI-16-SW-1:0.7
906520 -48	AOI-16-SW-2:0.9
906520 -49	AOI-16-SW-3:2.0
906520 -50	AOI-16-SW-4:1.0
906520 -51	AOI-16-SW-6:0.11
906520 -52	AOI-16-SW-5:0.7

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-8:2	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/28/19	Lab ID:	906520-02 1/6
Date Analyzed:	06/29/19	Data File:	062913.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.014
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-12:1.5	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-04 1/6
Date Analyzed:	06/27/19	Data File:	062737.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-10:1	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-06 1/6
Date Analyzed:	06/27/19	Data File:	062738.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-11:2	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-08 1/6
Date Analyzed:	06/27/19	Data File:	062739.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-14:1.0	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-10 1/6
Date Analyzed:	06/27/19	Data File:	062740.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-4:1	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-11 1/6
Date Analyzed:	06/27/19	Data File:	062741.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.21

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-5:1	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-12 1/6
Date Analyzed:	06/27/19	Data File:	062742.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.027

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-28	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-13 1/6
Date Analyzed:	06/27/19	Data File:	062743.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.31

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-6:1.5	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-16 1/6
Date Analyzed:	06/27/19	Data File:	062744.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.064

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-7:1.5	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-18 1/6
Date Analyzed:	06/27/19	Data File:	062745.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-9:1.5	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/28/19	Lab ID:	906520-20 1/6
Date Analyzed:	06/29/19	Data File:	062918.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	55	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.032
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.16
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-13:1	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-22 1/6
Date Analyzed:	06/27/19	Data File:	062746.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-SW-1:0.6	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-24 1/6
Date Analyzed:	06/27/19	Data File:	062752.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-SW-2:0.9	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-25 1/6
Date Analyzed:	06/28/19	Data File:	062753.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-29	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-26 1/6
Date Analyzed:	06/28/19	Data File:	062754.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-SW-3:0.7	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-27 1/600
Date Analyzed:	06/29/19	Data File:	062862.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78 d	50	150
DBC	105 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	6.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-B-1:1	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/28/19	Lab ID:	906520-28 1/6
Date Analyzed:	06/29/19	Data File:	062919.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-SW-4:0.9	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/28/19	Lab ID:	906520-30 1/6
Date Analyzed:	06/29/19	Data File:	062920.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.044
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	0.013
Endosulfan I	<0.01
Dieldrin	0.23
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-SW-5:0.6	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-31 1/60
Date Analyzed:	06/29/19	Data File:	062860.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85 d	50	150
DBC	102 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-B-2:1	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-32 1/6
Date Analyzed:	06/29/19	Data File:	062857.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-SW-6:1	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-34 1/6
Date Analyzed:	06/29/19	Data File:	062858.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-B-3:2	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-35 1/6
Date Analyzed:	06/28/19	Data File:	062759.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-B-4:1.5	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-37 1/6
Date Analyzed:	06/28/19	Data File:	062760.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-B-5:1	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-39 1/6
Date Analyzed:	06/27/19	Data File:	062747.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-B-8:1.5	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-41 1/6
Date Analyzed:	06/28/19	Data File:	062808.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-B-6:1.5	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-43 1/6
Date Analyzed:	06/28/19	Data File:	062811.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-B-7:1.0	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-45 1/6
Date Analyzed:	06/28/19	Data File:	062812.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-1:0.7	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-47 1/6
Date Analyzed:	06/28/19	Data File:	062813.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.064

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-2:0.9	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/28/19	Lab ID:	906520-48 1/6
Date Analyzed:	06/29/19	Data File:	062921.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	112	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.010
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-3:2.0	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-49 1/6
Date Analyzed:	06/28/19	Data File:	062814.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.13

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-4:1.0	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-50 1/6
Date Analyzed:	06/28/19	Data File:	062815.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-6:0.11	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-51 1/6
Date Analyzed:	06/28/19	Data File:	062816.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-5:0.7	Client:	Environmental Partners
Date Received:	06/25/19	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	906520-52 1/6
Date Analyzed:	06/28/19	Data File:	062817.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.074

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	09-1541 mb 1/6
Date Analyzed:	06/27/19	Data File:	062735.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/27/19	Lab ID:	09-1542 mb 1/6
Date Analyzed:	06/28/19	Data File:	062807.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906520
Date Extracted:	06/28/19	Lab ID:	09-1551 mb 1/6
Date Analyzed:	06/29/19	Data File:	062912.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	106	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/03/19

Date Received: 06/25/19

Project: Brookdale 74001.1, F&BI 906520

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906520-39 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	81	66	45-130	20

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	84	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/03/19

Date Received: 06/25/19

Project: Brookdale 74001.1, F&BI 906520

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906520-41 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	75	74	45-130	1

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	93	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/03/19

Date Received: 06/25/19

Project: Brookdale 74001.1, F&BI 906520

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906520-02 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	<0.01	72	74	45-111	3
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	<0.01	79	81	50-117	2
beta-BHC	mg/kg (ppm)	0.1	<0.01	84	86	49-109	2
delta-BHC	mg/kg (ppm)	0.1	0.010	78	81	39-114	4
Heptachlor	mg/kg (ppm)	0.1	<0.01	87	90	40-131	3
Aldrin	mg/kg (ppm)	0.1	<0.01	79	82	44-121	4
Heptachlor Epoxide	mg/kg (ppm)	0.1	<0.01	81	84	46-122	4
trans-Chlordane	mg/kg (ppm)	0.1	<0.01	83	87	41-129	5
cis-Chlordane	mg/kg (ppm)	0.1	<0.01	90	93	44-120	3
4,4'-DDE	mg/kg (ppm)	0.1	<0.01	79	83	50-150	5
Endosulfan I	mg/kg (ppm)	0.1	<0.01	81	84	45-124	4
Dieldrin	mg/kg (ppm)	0.1	<0.01	86	90	45-130	5
Endrin	mg/kg (ppm)	0.1	<0.01	102	105	50-140	3
4,4'-DDD	mg/kg (ppm)	0.1	<0.01	95	99	26-155	4
Endosulfan II	mg/kg (ppm)	0.1	<0.01	79	83	40-135	5
4,4'-DDT	mg/kg (ppm)	0.1	<0.01	92	95	50-150	3
Endrin Aldehyde	mg/kg (ppm)	0.1	<0.01	74	71	35-139	4
Methoxychlor	mg/kg (ppm)	0.1	<0.01	99	104	28-162	5
Endosulfan Sulfate	mg/kg (ppm)	0.1	<0.01	88	91	40-141	3
Endrin Ketone	mg/kg (ppm)	0.1	<0.01	92	95	41-147	3
Toxaphene	mg/kg (ppm)	4	<1	84	93	50-150	10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/03/19

Date Received: 06/25/19

Project: Brookdale 74001.1, F&BI 906520

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
alpha-BHC	mg/kg (ppm)	0.1	90	56-113
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	96	58-120
beta-BHC	mg/kg (ppm)	0.1	100	70-130
delta-BHC	mg/kg (ppm)	0.1	104	70-130
Heptachlor	mg/kg (ppm)	0.1	104	56-124
Aldrin	mg/kg (ppm)	0.1	99	70-130
Heptachlor Epoxide	mg/kg (ppm)	0.1	102	70-130
trans-Chlordane	mg/kg (ppm)	0.1	103	60-123
cis-Chlordane	mg/kg (ppm)	0.1	108	70-130
4,4'-DDE	mg/kg (ppm)	0.1	99	70-130
Endosulfan I	mg/kg (ppm)	0.1	100	62-124
Dieldrin	mg/kg (ppm)	0.1	104	70-130
Endrin	mg/kg (ppm)	0.1	120	56-147
4,4'-DDD	mg/kg (ppm)	0.1	118	54-137
Endosulfan II	mg/kg (ppm)	0.1	100	42-140
4,4'-DDT	mg/kg (ppm)	0.1	113	25-169
Endrin Aldehyde	mg/kg (ppm)	0.1	102	21-135
Methoxychlor	mg/kg (ppm)	0.1	120	54-154
Endosulfan Sulfate	mg/kg (ppm)	0.1	112	39-148
Endrin Ketone	mg/kg (ppm)	0.1	113	46-134
Toxaphene	mg/kg (ppm)	4	98	56-145

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

906520

SAMPLE CHAIN OF CUSTODY

ME 06/25/19 COS 1000 6

Report To Thom Morin, Betsy Wing

Company EP1

Address 1180 NW Maple St, Suite 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 315-0010 Email thom@epi-wa.com
betsy@epi-wa.com

SAMPLES (signature) <u>Betsy Wing</u>		PO #
PROJECT NAME <u>Brookdale</u>		INVOICE TO <u>14100 USA</u>
REMARKS	TURNAROUND TIME	
	Standard Turnaround <input type="checkbox"/> RUSH <u>1 week / 5 day</u> Rush charges authorized by:	
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Archive Samples <input type="checkbox"/> Other		

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 - pseudoin only	Method 8081 - Full Surt		
A01-15-B-9:25	01	6/25/19	0924	Soil	1											Hold
A01-15-B-8:2	02		0921											X		Hold
A01-15-B-8:3	03		0927													Hold
A01-15-B-10:15	04		0936										X			
A01-15-B-10:25	05		0940													Hold
A01-15-B-10:1	06		0939										X			
A01-15-B-10:2	07		0945													Hold
A01-15-B-11:2	08		0955										X			
A01-15-B-11:3	09		1001													Hold
A01-15-B-14:1.0	10		0958										X			

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
<u>Betsy Wing</u>		<u>Betsy Wing</u>		<u>EP1</u>		<u>6/25/19</u>		<u>1643</u>	
Relinquished by:		Relinquished by:		Relinquished by:		Relinquished by:		Relinquished by:	
<u>[Signature]</u>		<u>Betsy Wing</u>		<u>EP1</u>		<u>6/25/19</u>		<u>1643</u>	
Received by:		Received by:		Received by:		Received by:		Received by:	
<u>[Signature]</u>		<u>Betsy Wing</u>		<u>EP1</u>		<u>6/25/19</u>		<u>1643</u>	
				Samples received at		<u>2 oc</u>			

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

3

Page # 12 of 16
TURNAROUND TIME

☐ Standard Turnaround
☐ RUSH 1 week / 5 day
 Rush charges authorized by:

SAMPLE DISPOSAL

SAMPLE DISPOSAL

☐ Dispose after 30 days

☐ Archive Samples

☐ Other _____

[illegible]

906520

Betsy

SAMPLE CHAIN OF CUSTODY ME 06/25/19

cos

Report To Thomas Morin, Fire Wing

Company EP1

Address 1180 NW Maple St, Suite 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email thomasm@ep1.com

Betsy@ep1.com

SAMPLERS <i>(Signature)</i> <u>Betsy Wing</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS	INVOICE TO <u>EP1</u> <u>kluge USA</u>

TURNAROUND TIME Page # <u>3</u> of <u>6</u>	
<input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH <u>1 week / 5 day</u> Rush charges authorized by:	
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Archive Samples <input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM method 8081 Diesel only method 80810 Full Sim	
A01-15-B-14:2:0	21	6/25/19	1004	Soil	11								HOLD
A01-15-B-13:1	22		1009									X	Hold
A01-15-B-13:2	23		1017										Hold
A01-13-SW-1:0:6	24		1118									X	Hold
A01-13-SW-2:0:9	25		1126									X	
A01-13-SW-3:0:9			1134										ME 6/25/19
DUP-29	26		—									X	
A01-13-SW-3:0:7	27		1142									X	
A01-13-B-1:1	28		1129									X	
A01-13-B-1:2	29		1139										HOLD

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by:	<u>Betsy Wing</u>		<u>Betsy Wing</u>		<u>EP1</u>		<u>6/25/19</u>		<u>1643</u>
Received by:	<u>Betsy Wing</u>		<u>Betsy Wing</u>		<u>EP1</u>		<u>6/25/19</u>		<u>1643</u>
Relinquished by:									
Received by:									

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

906520

SAMPLE CHAIN OF CUSTODY

ME 06/25/19

COS

Page # 4 of 10

Report To Thor Monin, Betsy WingCompany EPIAddress 1180 NW Maple St, Suite 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0900 Email thor.monin@epi-wa.com
betsy.wing@epi-wa.comSAMPLES (signature)
Betsy Wing

PROJECT NAME

Brookdale

PO #

14001.1

REMARKS

INVOICE TO
Idjib USA

TURNAROUND TIME

☐ Standard Turnaround
☐ RUSH 1 week RTT

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☐ Archive Samples
☐ Other

ANALYSES REQUESTED

TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 - Dichloro only	Method 8081 - Full Suite

Notes

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 - Dichloro only	Method 8081 - Full Suite	Notes
A01-13-SW-4:0.9	30	6/25/19	1150	soil	1								X		
A01-13-SW-5:0.6	31		1158										X		
A01-13-B-2:1	32		1149										V		Label 2:1.5
A01-13-B-2:2	33		1155												HOLD
A01-13-SW-6:1	34		1244										X		
A01-13-B-3:2	35		1243										X		
A01-13-B-3:3	36		1249												HOLD
A01-13-B-4:1.5	37		1252										X		
A01-13-B-4:2.5	38		1304										X		HOLD
A01-13-B-5:1	39		1259										X		

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by:

Betsy Wing

Received by:

Betsy Wing

Relinquished by:

Betsy Wing

Received by:

Betsy Wing

COMPANY

DATE

TIME

COMPANY

EPI6/25/1911:436/25/1916:432:002:00

906520

SAMPLE CHAIN OF CUSTODY ME 06/25/19

cos 5 of 10

Report To Thor Min, BetyungCompany EPIAddress 1180 NW Maple St, Suite 310City, State, ZIP Issaquah, WA 98027Phone 206-345-6610 Email thor.min@epi-wa.combetyung@epi-wa.com

SAMPLERS (signature) <u>Betyung</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001-1</u>
REMARKS	INVOICE TO <u>Idji's USA</u>

TURNAROUND TIME
<input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH <u>1 week</u> <u>THAT</u> Rush charges authorized by:
SAMPLE DISPOSAL
<input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Archive Samples <input type="checkbox"/> Other

							ANALYSES REQUESTED										
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars		TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081 - Dieldrin only	method 8081 - Full SWHC	Notes	
A01-13-B-5:2	40	6/25/19	1309	501	1									X		HOLD	
A01-13-B-8:1.5	41		1322											X			
A01-13-B-8:2.5	42		1330													HOLD	
A01-13-B-6:1.5	43		1325											X			
A01-13-B-6:2.5	44		1337													HOLD	
A01-13-B-7:1.0	45		1346											X			
A01-13-B-7:2.0	46		1354													HOLD	
A01-16-SW-1:0.7	47		1444											X			
A01-16-SW-2:0.9	48		1448												X		
A01-16-SW-3:2.0	49		1452											X			

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>Betyung</u>		Betyung		EPI		6/25/19		11043	
Received by: <u>[Signature]</u>		Bisrat Tekesse		EPI		6/25/19		1643	
Relinquished by:				Samples received at		2°C			
Received by:									

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2

ME 06/25/19

☐ Other:

Page # 5 of 10
TURNAROUND TIME
Standard Turnaround
SSH 1 week TAT
charges authorized by:

SAMPLE DISPOSAL

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>[Signature]</i>				
Received by: <i>[Signature]</i>	Betany Wing	EP1	6/25/17	11043
Relinquished by: <i>[Signature]</i>	BUSNET TROUSE	F781	6/25/17	1613
Received by:		Samples received at	2 °C	

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
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fbi@isomedia.com
www.friedmanandbruya.com

July 16, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 906544

Dear Mr Morin:

Included are the additional results from the testing of material submitted on June 26, 2019 from the Brookdale 74001.1, F&BI 906544 project. There are 6 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0716R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 26, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 906544 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906544 -01	AOI-16-B-2:1.5
906544 -02	AOI-16-B-2:2.5
906544 -03	DUP-31
906544 -04	AOI-16-B-4:1.5
906544 -05	AOI-16-B-4:2.5
906544 -06	AOI-16-B-1:2
906544 -07	AOI-16-B-1:3
906544 -08	DUP-30
906544 -09	AOI-16-B-3:1.5
906544 -10	AOI-16-B-3:2.5
906544 -11	AOI-16-B-5:1.5
906544 -12	AOI-16-B-5:2.5
906544 -13	AOI-16-B-6:1.5
906544 -14	AOI-16-B-6:2.5
906544 -15	AOI-16-B-7:1.5
906544 -16	AOI-16-B-7:2.5
906544 -17	AOI-16-B-9:1.5
906544 -18	AOI-16-B-9:2.5
906544 -19	AOI-16-B-8:1.5
906544 -20	AOI-16-B-8:2.5
906544 -21	AOI-17-SW-1:0.9
906544 -22	AOI-17-SW-2:0.7
906544 -23	AOI-17-SW-3:0.9
906544 -24	AOI-17-SW-4:1.0
906544 -25	AOI-17-SW-5:1.0
906544 -26	AOI-17-SW-6:0.9
906544 -27	AOI-17-B-1:1.5
906544 -28	AOI-17-B-1:2.5
906544 -29	AOI-17-B-3:1.5
906544 -30	AOI-17-B-3:2.5
906544 -31	AOI-17-B-4:1.5
906544 -32	AOI-17-B-4:2.5
906544 -33	AOI-17-B-6:1.5
906544 -34	AOI-17-B-6:2.5
906544 -35	AOI-17-B-5:1.5
906544 -36	AOI-17-B-5:2.5
906544 -37	AOI-17-B-9:2.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 26, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 906544 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906544 -38	AOI-17-B-9:3.0
906544 -39	AOI-17-B-7:1.5
906544 -40	AOI-17-B-7:2.5
906544 -41	AOI-17-B-10:2
906544 -42	AOI-17-B-10:3
906544 -43	AOI-17-B-8:1.5
906544 -44	AOI-17-B-8:2.5
906544 -45	AOI-17-B-11:2.0
906544 -46	AOI-17-B-11:3.0
906544 -47	AOI-17-B-2:1.5
906544 -48	AOI-17-B-2:2.5
906544 -49	DUP32
906544 -50	DUP33

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-B-2:2.5	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	07/09/19	Lab ID:	906544-02 1/6
Date Analyzed:	07/12/19	Data File:	071160.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	57	50	150
DBC	73	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.013

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	07/09/19	Lab ID:	09-1640 mb 1/6
Date Analyzed:	07/11/19	Data File:	071145.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/16/19

Date Received: 06/26/19

Project: Brookdale 74001.1, F&BI 906544

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907087-29 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.049	80 b	75 b	45-130	6 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	99	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

ME 06/26/19

Page # 1 of 1

005
of

Report To: Harold Moon, Betsy Wining

Company EP1

Address 1180 New Maple St, Suite 310

City, State, ZIP Issaquah, WA 98027

Phone 405-368-0010 Email thommcg@verizon.net

SAMPLERS (signature) <i>M. A. Turner</i>		Page # <u>1</u> of <u>2</u>
PROJECT NAME <i>Bioetide</i>	PO # <i>14001.1</i>	TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <i>1-week TAT</i> Rush charges authorized by: _____
REMARKS <i>Idlyp USA</i>	INVOICE TO	
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____		

						ANALYSES REQUESTED								
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM		
												Method 8081 Fieldtrip only Method 8081 Full Suite		
A01-14-B-2:1.5	01	4/24/19	0836	Soil	1							X	(X) per BW 3/6/19 Notes AL	
A01-16-B-2:2.5	02		0844									(X)		HOLD
DUP-31	03		—									X		
A01-14-B-4:1.5	04		0854									X	HOLD	
A01-16-B-4:2.5	05		0900											
A01-16-B-1:2	06		0893									X		
A01-16-B-1:3	07		0843										HOLD	
DUP-36	08											X		
A01-16-B-3:1.5	09		0853									X		
A01-16-B-3:2.5	10		0901										HOLD	

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>Betsy King</i>	Betsy King	EP1	6/26/19	11:49
Received by: <i>Blush</i>	VINCI	FB	6/26/19	16:49
Relinquished by:				
Received by:		Samples received at	4 -OC	

906544

SAMPLE CHAIN OF CUSTODY

ME 06/26/19

2 of 5

Report To: Ther Moin, B. wing

Company: ERI

Address: 1150 NW Maple St Suite 310

City, State, ZIP: Issaquah, WA 98027

Phone: 425-345-0016 Email: Sharon@ericonsulting.com

SAMPLERS (signature) <u>M. Wing</u>		PO #
PROJECT NAME <u>Brookside</u>		INVOICE TO <u>Idaho USA</u>
REMARKS		

TURNAROUND TIME
☐ Standard Turnaround
☐ RUSH 1-week 171
 Rush charges authorized by: _____

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Archive Samples
☐ Other _____

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 (Quadrupole)	Method 8082 (Full Suite)		
A01-16-B-5:1.5	11	6/26/19	0908	Soil	1							X				Hold
A01-16-B-5:2.5	12		0914													Hold
A01-16-B-6:1.5	13		0911									X				Hold
A01-16-B-6:2.5	14		0919													Hold
A01-16-B-7:1.5	15		0924									X				Hold
A01-16-B-7:2.5	16		0934													Hold
A01-16-B-9:1.5	17		0927									X				Hold
A01-16-B-9:2.5	18		0933													Hold
A01-16-B-8:1.5	19		0939										X			Hold
A01-16-B-8:2.5	20		0947													Hold

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Received by: <u>Betsy Wing</u>	Received by: <u>VN/14</u>	Received by:
Relinquished by:	Relinquished by:	Relinquished by:
Received by:	Received by:	Received by:

Samples received at 4 o'clock

906544

SAMPLE CHAIN OF CUSTODY

ME 06/26/19

205

Report To John Klein, B. WingCompany EPIAddress 1180 NW Maple St Suite 310City, State, ZIP Issaquah, WA 98027Phone 206-255-0010 Email John.Klein@epi.comBetsy Wing

SAMPLERS (signature) <u>John Klein</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>740011</u>
REMARKS	INVOICE TO <u>Idaho USA</u>

TURNAROUND TIME Page # <u>3</u> of <u>5</u>	
<input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH <u>1-week HH</u> Rush charges authorized by:	
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED								Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 (Pilot in only)	
A01-17-SW-1:0.9	21	6/26/19	1022	Soil	1								X	
A01-17-SW-2:0.7	22		1034										X	
A01-17-SW-3:0.9	23		1040										X	
A01-17-SW-4:1.0	24		1046										X	
A01-17-SW-5:1.0	25		1052										X	
A01-17-SW-6:0.9	26		1100										X	
A01-17-B-1:1.5	27		1053										X	
A01-17-B-1:2.5	28		1059											HOLD
A01-17-B-3:1.5	29		1112										X	
A01-17-B-3:2.5	30		1122											HOLD

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>Betsy Wing</u>		Betsy Wing		EPI		6/26/19		11:49	
Received by: <u>Betsy Wing</u>		Betsy Wing		EPI		6/26/19		16:49	
Relinquished by:									
Received by:				Samples received at		4:00			

906544

SAMPLE CHAIN OF CUSTODY

ME 06/26/19

COS

Report To Ther Mann, Betsy Wing

Company EPI

Address 1180 New Apple St Suite 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0300 Email thermann@epi-usa.com

TURNAROUND TIME # 4 of 5

SAMPLERS (signature) [Signature]

PROJECT NAME Break dale

PO # 94001-1

INVOICE TO Idaho USA

☐ Standard Turnaround
☒ RUSH 1 week
Rush charges authorized by: [Signature]

SAMPLE DISPOSAL

☐ Dispose after 30 days
☐ Archive Samples
☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-17-B-4:1.5	31	6/26/19	1213	Soil	1							X	HOLD
A01-17-B-4:2.5	32	6/26/19	1221										HOLD
A01-17-B-6:1.5	33		1214									X	HOLD
A01-17-B-6:2.5	34		1224										HOLD
A01-17-B-5:1.5	35		1239									X	HOLD
A01-17-B-5:2.5	36		1247										HOLD
A01-17-B-9:2.0	37		1248									X	HOLD
D01-17-B-9:3.0	38		1256										HOLD
A01-17-B-7:1.5	39		1303									X	HOLD
A01-17-B-7-2.5	40		1323										HOLD

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE		PRINT NAME		COMPANY	DATE	TIME
Received by: <u>[Signature]</u>		Betsy Wing				
Relinquished by: <u>[Signature]</u>		VNH			6/26/19	1649
Received by:						
Samples received at <u>4</u> o'clock						

906544

SAMPLE CHAIN OF CUSTODY ME 06/26/19

Page # 5 of 5 COS

Report To Tom Moring, Betsy Wing

Company ERI

Address 1180 NW Maple St, Suite 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email tom@eri-wa.com
betsy@eri-wa.com

SAMPLES (signature) <u>Betsy Wing</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS	INVOICE TO <u>ICWJO USA</u>

TURNAROUND TIME Page # 5 of 5	
<input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> CRUSH <u>1 week 1 day</u> Rush charges authorized by: _____	
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-17-B-10:2	41	6/26	1308	soil	1							<input checked="" type="checkbox"/>	
A01-17-B-10:3	42		1326									<input checked="" type="checkbox"/>	HOLD
A01-17-B-8:1.5	43		1337									<input checked="" type="checkbox"/>	
A01-17-B-8:2.5	44		1355									<input checked="" type="checkbox"/>	HOLD
A01-17-B-11:2.6	45		1340									<input checked="" type="checkbox"/>	
A01-17-B-11:3.0	46		1356									<input checked="" type="checkbox"/>	HOLD
A01-17-B-2:1.5	47		1111									<input checked="" type="checkbox"/>	
A01-17-B-2:2.5	48		1121									<input checked="" type="checkbox"/>	HOLD
DUP 32	49											<input checked="" type="checkbox"/>	1 (X) per 8w
DUP 33	50											<input checked="" type="checkbox"/>	6/27/19 MC

SIGNATURE		PRINT NAME		COMPANY	DATE	TIME
Relinquished by: <u>Betsy Wing</u>		<u>Betsy Wing</u>				
Received by: <u>John J</u>		<u>VIN+ J</u>		<u>ERI</u>	<u>6/26/19</u>	<u>1047</u>
Relinquished by:				<u>ERI</u>	<u>6/26/19</u>	<u>1149</u>
Received by:				Samples received at <u>4</u> oc		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 8, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 906544

Dear Mr Morin:

Included are the results from the testing of material submitted on June 26, 2019 from the Brookdale 74001.1, F&BI 906544 project. There are 42 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0708R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

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906544 -02	AOI-16-B-2:2.5
906544 -03	DUP-31
906544 -04	AOI-16-B-4:1.5
906544 -05	AOI-16-B-4:2.5
906544 -06	AOI-16-B-1:2
906544 -07	AOI-16-B-1:3
906544 -08	DUP-30
906544 -09	AOI-16-B-3:1.5
906544 -10	AOI-16-B-3:2.5
906544 -11	AOI-16-B-5:1.5
906544 -12	AOI-16-B-5:2.5
906544 -13	AOI-16-B-6:1.5
906544 -14	AOI-16-B-6:2.5
906544 -15	AOI-16-B-7:1.5
906544 -16	AOI-16-B-7:2.5
906544 -17	AOI-16-B-9:1.5
906544 -18	AOI-16-B-9:2.5
906544 -19	AOI-16-B-8:1.5
906544 -20	AOI-16-B-8:2.5
906544 -21	AOI-17-SW-1:0.9
906544 -22	AOI-17-SW-2:0.7
906544 -23	AOI-17-SW-3:0.9
906544 -24	AOI-17-SW-4:1.0
906544 -25	AOI-17-SW-5:1.0
906544 -26	AOI-17-SW-6:0.9
906544 -27	AOI-17-B-1:1.5
906544 -28	AOI-17-B-1:2.5
906544 -29	AOI-17-B-3:1.5
906544 -30	AOI-17-B-3:2.5
906544 -31	AOI-17-B-4:1.5
906544 -32	AOI-17-B-4:2.5
906544 -33	AOI-17-B-6:1.5
906544 -34	AOI-17-B-6:2.5
906544 -35	AOI-17-B-5:1.5
906544 -36	AOI-17-B-5:2.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906544 -37	AOI-17-B-9:2.0
906544 -38	AOI-17-B-9:3.0
906544 -39	AOI-17-B-7:1.5
906544 -40	AOI-17-B-7:2.5
906544 -41	AOI-17-B-10:2
906544 -42	AOI-17-B-10:3
906544 -43	AOI-17-B-8:1.5
906544 -44	AOI-17-B-8:2.5
906544 -45	AOI-17-B-11:2.0
906544 -46	AOI-17-B-11:3.0
906544 -47	AOI-17-B-2:1.5
906544 -48	AOI-17-B-2:2.5
906544 -49	DUP32
906544 -50	DUP33

The 8081B calibration standard failed the acceptance criteria for several pesticides. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-B-2:1.5	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	906544-01 1/6
Date Analyzed:	06/28/19	Data File:	062818.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.063

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-31	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	906544-03 1/6
Date Analyzed:	06/28/19	Data File:	062819.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.028

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-B-4:1.5	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/28/19	Lab ID:	906544-04 1/6
Date Analyzed:	06/29/19	Data File:	062925.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-B-1:2	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	07/01/19	Lab ID:	906544-06 1/6
Date Analyzed:	07/02/19	Data File:	070220.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	70	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-30	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	906544-08 1/6
Date Analyzed:	06/28/19	Data File:	062821.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-B-3:1.5	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	906544-09 1/6
Date Analyzed:	06/28/19	Data File:	062822.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-B-5:1.5	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	906544-11 1/6
Date Analyzed:	06/28/19	Data File:	062823.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-B-6:1.5	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	906544-13 1/6
Date Analyzed:	06/28/19	Data File:	062850.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-B-7:1.5	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	07/01/19	Lab ID:	906544-15 1/6
Date Analyzed:	07/02/19	Data File:	070221.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	73	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-B-9:1.5	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	906544-17 1/6
Date Analyzed:	06/28/19	Data File:	062852.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-B-8:1.5	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/28/19	Lab ID:	906544-19 1/6
Date Analyzed:	06/29/19	Data File:	062926.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-SW-1:0.9	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	906544-21 1/6
Date Analyzed:	06/28/19	Data File:	062853.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	109	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.24

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-SW-2:0.7	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	906544-22 1/6
Date Analyzed:	06/28/19	Data File:	062854.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	58	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.068

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-SW-3:0.9	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	906544-23 1/6
Date Analyzed:	06/29/19	Data File:	062855.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-SW-4:1.0	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/28/19	Lab ID:	906544-24 1/6
Date Analyzed:	06/29/19	Data File:	062927.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.039
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.019
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-SW-5:1.0	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	906544-25 1/6
Date Analyzed:	06/28/19	Data File:	062834.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.29

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-SW-6:0.9	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	906544-26 1/6
Date Analyzed:	06/28/19	Data File:	062835.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	58	50	150
DBC	73	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.16

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-B-1:1.5	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	906544-27 1/6
Date Analyzed:	06/28/19	Data File:	062836.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	54	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.012

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-B-3:1.5	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	906544-29 1/6
Date Analyzed:	06/28/19	Data File:	062837.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.023

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-B-4:1.5	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	906544-31 1/6
Date Analyzed:	06/28/19	Data File:	062838.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	58	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-B-6:1.5	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/28/19	Lab ID:	906544-33 1/6
Date Analyzed:	06/29/19	Data File:	062928.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	57	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.023
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-B-5:1.5	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	906544-35 1/6
Date Analyzed:	06/28/19	Data File:	062839.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	51	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.012

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-B-9:2.0	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	07/01/19	Lab ID:	906544-37 1/6
Date Analyzed:	07/03/19	Data File:	070264.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-B-7:1.5	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	07/01/19	Lab ID:	906544-39 1/6
Date Analyzed:	07/03/19	Data File:	070263.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-B-10:2	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	906544-41 1/6
Date Analyzed:	06/28/19	Data File:	062843.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	54	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.012

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-B-8:1.5	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	906544-43 1/6
Date Analyzed:	06/28/19	Data File:	062844.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-B-11:2.0	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	906544-45 1/6
Date Analyzed:	06/28/19	Data File:	062845.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.020

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-B-2:1.5	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	906544-47 1/6
Date Analyzed:	06/28/19	Data File:	062846.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP32	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	906544-49 1/6
Date Analyzed:	06/28/19	Data File:	062847.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP33	Client:	Environmental Partners
Date Received:	06/26/19	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	906544-50 1/6
Date Analyzed:	06/28/19	Data File:	062849.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	56	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/27/19	Lab ID:	09-1542 mb 1/6
Date Analyzed:	06/28/19	Data File:	062807.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/28/19	Lab ID:	09-1543 mb 1/6
Date Analyzed:	06/28/19	Data File:	062830.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	07/01/19	Lab ID:	09-1556 mb 1/6
Date Analyzed:	07/02/19	Data File:	070236.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906544
Date Extracted:	06/28/19	Lab ID:	09-1551 mb 1/6
Date Analyzed:	06/29/19	Data File:	062912.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	106	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/08/19

Date Received: 06/26/19

Project: Brookdale 74001.1, F&BI 906544

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906520-41 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	75	74	45-130	1

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	93	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/08/19

Date Received: 06/26/19

Project: Brookdale 74001.1, F&BI 906544

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906544-25 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.27	55 b	56 b	45-130	2 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	97	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/08/19

Date Received: 06/26/19

Project: Brookdale 74001.1, F&BI 906544

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906565-35 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	77	77	45-130	0

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	104	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/08/19

Date Received: 06/26/19

Project: Brookdale 74001.1, F&BI 906544

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906520-02 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	<0.01	72	74	45-111	3
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	<0.01	79	81	50-117	2
beta-BHC	mg/kg (ppm)	0.1	<0.01	84	86	49-109	2
delta-BHC	mg/kg (ppm)	0.1	0.010	78	81	39-114	4
Heptachlor	mg/kg (ppm)	0.1	<0.01	87	90	40-131	3
Aldrin	mg/kg (ppm)	0.1	<0.01	79	82	44-121	4
Heptachlor Epoxide	mg/kg (ppm)	0.1	<0.01	81	84	46-122	4
trans-Chlordane	mg/kg (ppm)	0.1	<0.01	83	87	41-129	5
cis-Chlordane	mg/kg (ppm)	0.1	<0.01	90	93	44-120	3
4,4'-DDE	mg/kg (ppm)	0.1	<0.01	79	83	50-150	5
Endosulfan I	mg/kg (ppm)	0.1	<0.01	81	84	45-124	4
Dieldrin	mg/kg (ppm)	0.1	<0.01	86	90	45-130	5
Endrin	mg/kg (ppm)	0.1	<0.01	102	105	50-140	3
4,4'-DDD	mg/kg (ppm)	0.1	<0.01	95	99	26-155	4
Endosulfan II	mg/kg (ppm)	0.1	<0.01	79	83	40-135	5
4,4'-DDT	mg/kg (ppm)	0.1	<0.01	92	95	50-150	3
Endrin Aldehyde	mg/kg (ppm)	0.1	<0.01	74	71	35-139	4
Methoxychlor	mg/kg (ppm)	0.1	<0.01	99	104	28-162	5
Endosulfan Sulfate	mg/kg (ppm)	0.1	<0.01	88	91	40-141	3
Endrin Ketone	mg/kg (ppm)	0.1	<0.01	92	95	41-147	3
Toxaphene	mg/kg (ppm)	4	<1	84	93	50-150	10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/08/19

Date Received: 06/26/19

Project: Brookdale 74001.1, F&BI 906544

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR ORGANOCHLORINE PESTICIDES BY EPA METHOD 8081B

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
alpha-BHC	mg/kg (ppm)	0.1	90	56-113
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	96	58-120
beta-BHC	mg/kg (ppm)	0.1	100	70-130
delta-BHC	mg/kg (ppm)	0.1	104	70-130
Heptachlor	mg/kg (ppm)	0.1	104	56-124
Aldrin	mg/kg (ppm)	0.1	99	70-130
Heptachlor Epoxide	mg/kg (ppm)	0.1	102	70-130
trans-Chlordane	mg/kg (ppm)	0.1	103	60-123
cis-Chlordane	mg/kg (ppm)	0.1	108	70-130
4,4'-DDE	mg/kg (ppm)	0.1	99	70-130
Endosulfan I	mg/kg (ppm)	0.1	100	62-124
Dieldrin	mg/kg (ppm)	0.1	104	70-130
Endrin	mg/kg (ppm)	0.1	120	56-147
4,4'-DDD	mg/kg (ppm)	0.1	118	54-137
Endosulfan II	mg/kg (ppm)	0.1	100	42-140
4,4'-DDT	mg/kg (ppm)	0.1	113	25-169
Endrin Aldehyde	mg/kg (ppm)	0.1	102	21-135
Methoxychlor	mg/kg (ppm)	0.1	120	54-154
Endosulfan Sulfate	mg/kg (ppm)	0.1	112	39-148
Endrin Ketone	mg/kg (ppm)	0.1	113	46-134
Toxaphene	mg/kg (ppm)	4	98	56-145

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

ME 06/26/19

cos

SAMPLERS (signature)

Report To Thom Winn, Betsy Wing

Company EPI

Address 1180 New Maple St, Suite 310

City, State, ZIP Issaquah, WA 98027

Phone 425-385-0010 Email thom@epi-wa.com
betsy@epi-wa.com

PROJECT NAME

Brookdale

PO #

14001.1

REMARKS

Invoice USA

TURNAROUND TIME

☐ Standard Turnaround
☐ RUSH 1-Week TM
Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☐ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 Field only	Method 8081 Full suite	Notes
A01-14-B-2:1.5	01	6/26/19	0836	Soil	1								X		Hold
A01-16-B-2:2.5	02		0844												
DUP-31	03												X		
A01-16-B-4:1.5	04		0854											X	
A01-16-B-4:2.5	05		0900												Hold
A01-16-B-1:2	06		0833										X		
A01-16-B-1:3	07		0843												Hold
DUP-36	08												X		
A01-16-B-3:1.5	09		0853										X		
A01-16-B-3:2.5	10		0901												Hold

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Received by: Betsy Wing

Betsy Wing

EPI

6/26/19

1649

Relinquished by:

VIN41

EB

6/26/19

1649

Received by:

Samples received at

4

OC

906544

SAMPLE CHAIN OF CUSTODY

ME 06/26/19

2 of 5

Report To Thom Morin, B. wing

Company ERT

Address 1150 NW Maple St Suite 310

City, State, ZIP Issaquah, WA 98027

Phone 425-345-0016 Email thom.morin@ert.com

SAMPLES (signature) <u>Thom Morin</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>M001.1</u>
REMARKS	INVOICE TO <u>Idrup USA</u>

TURNAROUND TIME Page # <u>2</u> of <u>5</u>	
<input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH <u>1-week TAT</u> Rush charges authorized by: _____	
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM method 8081 (acid rain only) method 8082 (Full Suite)	
A01-16-B-5:1.5	11	6/26/19	0908	Soil	1							X	HOLD
A01-16-B-5:2.5	12		0914									X	HOLD
A01-16-B-6:1.5	13		0911									X	HOLD
A01-16-B-6:2.5	14		0919									X	HOLD
A01-16-B-7:1.5	15		0924									X	HOLD
A01-16-B-7:2.5	16		0934									X	HOLD
A01-16-B-9:1.5	17		0927									X	HOLD
A01-16-B-9:2.5	18		0933									X	HOLD
A01-16-B-8:1.5	19		0939									X	HOLD
A01-16-B-8:2.5	20		0947									X	HOLD

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Received by: <u>Thom Morin</u>		<u>Thom Morin</u>		<u>ERT</u>		6/26/19	1049
Relinquished by: <u>Wald</u>		<u>Wald</u>		<u>ERT</u>		6/26/19	1049
Received by:							

906544

SAMPLE CHAIN OF CUSTODY

ME 06/26/19

205

Report To John Main, B. WingCompany EPTAddress 1180 NW Maple St Suite 310City, State, ZIP Issaquah, WA 98027Phone 360-200-0000 Email John.Main@epi.comJohn Main, B. Wing

SAMPLERS (signature)

PROJECT NAME

Brookdale

PO #

74001-1

REMARKS

INVOICE TO
Ichiu USAPage # 3 of 5

TURNAROUND TIME

☐ Standard Turnaround
☐ RUSH 1-week PT
 Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-17-SW-1:0.9	21	6/26/19	1022	Soil	1							X	Method 8081 (Preliminary Only) Method 8080 (Full Suite)
A01-17-SW-2:0.7	22		1034									X	
A01-17-SW-3:0.9	23		1040									X	
A01-17-SW-4:1.0	24		1046									X	
A01-17-SW-5:1.0	25		1052									X	
A01-17-SW-6:0.9	26		1100									X	
A01-17-B-1:1.5	27		1053									X	
A01-17-B-1:2.5	28		1059									X	HOLD
A01-17-B-3:1.5	29		1112									X	
A01-17-B-3:2.5	30		1122										HOLD

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by:

John Main

PRINT NAME

Betsy Wing

COMPANY

EPT

6/26/19

1649

Received by:

John Main

PRINT NAME

Vina

COMPANY

EPT

6/26/19

1649

Relinquished by:

PRINT NAME

COMPANY

Received by:

PRINT NAME

COMPANY

SAMPLE CHAIN OF CUSTODY

ME 06/26/19 COS

906544

Report To Thom Mann, Betsy Wing

Company ERI

Address 1180 NW Maple St Suite 310

City, State, ZIP Issaquah, WA 98027

Phone 425-315-0344 Email thom@201-wa.com

Betsy Wing

SAMPLES (signature) <u>Thom Mann</u>		PO # <u>94001-1</u>	TURNAROUND TIME # <u>4</u> of <u>5</u>
PROJECT NAME <u>Brookdale</u>		INVOICE TO <u>Idaho USA</u>	<input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH <u>1 week</u> Rush charges authorized by:
REMARKS			
		SAMPLE DISPOSAL	<input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Archive Samples <input type="checkbox"/> Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 (Preliminary Only)	Method 8081 (Full Suite)		
A01-17-B-4:1.5	31	6/26/19	1213	Soil	1								X			HOLD
A01-17-B-4:2.5	32	6/26/19	1221													HOLD
A01-17-B-6:1.5	33		1214										X			
A01-17-B-6:2.5	34		1224													HOLD
A01-17-B-5:1.5	35		1239										X			
A01-17-B-5:2.5	36		1247													HOLD
A01-17-B-9:2.0	37		1248										X			
A01-17-B-9:3.0	38		1256													HOLD
A01-17-B-7:1.5	39		1303										X			
A01-17-B-7:2.5	40		1323													HOLD

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
<u>Betsy Wing</u>		<u>Betsy Wing</u>		<u>ERI</u>		6/26/19	1649
Received by: <u>Betsy Wing</u>						6/26/19	1649
Relinquished by:							
Received by:				Samples received at		4	00

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

906544

SAMPLE CHAIN OF CUSTODY ME 06/26/19

Page # 5 of 5 COS

Report To Tom Macion, Betsy Wing

Company ERI

Address 1180 NW Maple St, Suite 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email tom@eri-wa.com
betsy@eri-wa.com

SAMPLES (signature) <u>Betsy Wing</u>		PO # <u>74001.1</u>
PROJECT NAME <u>Brookdale</u>		INVOICE TO <u>14010 USA</u>
REMARKS		

TURNAROUND TIME
<input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>1 week / 5 day</u> Rush charges authorized by:
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other

							ANALYSES REQUESTED								
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes		
A01-17-B-10:2	41	6/26	1308	soil	1							X			
A01-17-B-10:3	42		1326										HOLD		
A01-17-B-8:1.5	43		1337									X			
A01-17-B-8:2.5	44		1355										HOLD		
A01-17-B-11:2.6	45		1340									X			
A01-17-B-11:3.0	46		1356										HOLD		
A01-17-B-2:1.5	47		1111									X			
A01-17-B-2:2.5	48		1121										HOLD		
DUP 32	49											X	1 (D) per BW		
DUP 33	50											X	6/27/19 ME		

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <u>Betsy Wing</u>		Betsy Wing		ERI		6/26/19	1047
Received by: <u>John J</u>		VIN# <u>J</u>		FBI		6/26/19	1149
Relinquished by:							
Received by:				Samples received at		4	00

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 9, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 906565

Dear Mr Morin:

Included are the results from the testing of material submitted on June 27, 2019 from the Brookdale 74001.1, F&BI 906565 project. There are 48 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0709R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 27, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 906565 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906565 -01	AOI-22-SW-1:0.4
906565 -02	AOI-22-B-1:2
906565 -03	AOI-22-B-1:3
906565 -04	AOI-22-SW-2:1.0
906565 -05	AOI-22-SW-3:0.11
906565 -06	AOI-22-SW-4:0.9
906565 -07	AOI-22-B-2:1.5
906565 -08	AOI-22-B-2:2.5
906565 -09	AOI-22-B-3:2.0
906565 -10	AOI-22-B-3:3.0
906565 -11	AOI-22-B-4:1.5
906565 -12	AOI-22-B-4:2.5
906565 -13	AOI-22-SW-5:0.6
906565 -14	AOI-22-SW-6:1.1
906565 -15	AOI-22-SW-7:0.6
906565 -16	AOI-22-B-5:1
906565 -17	AOI-22-B-5:2
906565 -18	AOI-22-SW-8:0.7
906565 -19	AOI-22-B-6:1.5
906565 -20	AOI-22-B-6:2.5
906565 -21	AOI-22-B-7:1.5
906565 -22	AOI-22-B-7:2.5
906565 -23	AOI-22-B-9:1.5
906565 -24	AOI-22-B-9:2.5
906565 -25	AOI-22-B-8:1.5
906565 -26	AOI-22-B-8:2.5
906565 -27	AOI-22-B-11:1.5
906565 -28	AOI-22-B-11:2.5
906565 -29	AOI-22-B-10:1.5
906565 -30	AOI-22-B-10:2.5
906565 -31	AOI-20-SW-1:1.2
906565 -32	AOI-20-SW-2:0.8
906565 -33	AOI-20-SW-3:0.6
906565 -34	AOI-20-SW-4:0.8
906565 -35	AOI-20-B-1:1
906565 -36	AOI-20-B-1:2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
906565 -37	AOI-20-B-5:0.8
906565 -38	AOI-20-B-6:1.4
906565 -39	AOI-20-B-2:1.5
906565 -40	AOI-20-B-2:2.5
906565 -41	AOI-20-SW-7:1.2
906565 -42	AOI-20-B-3:1.5
906565 -43	AOI-20-B-3:2.5
906565 -44	DUP-36
906565 -45	DUP-37
906565 -46	AOI-20-B-4:1.5
906565 -47	AOI-20-B-4:2.5
906565 -48	AOI-20-B-9:2.0
906565 -49	AOI-20-B-9:3.0
906565 -50	AOI-20-B-5:1.5
906565 -51	AOI-20-B-5:2.5
906565 -52	AOI-20-B-6:1.5
906565 -53	AOI-20-B-6:2.5
906565 -54	DUP-35
906565 -55	DUP-34

The 8081B calibration standard failed the acceptance criteria for several pesticides. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-SW-1:0.4	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	06/28/19	Lab ID:	906565-01 1/6
Date Analyzed:	06/29/19	Data File:	062929.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-B-1:2	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-02 1/6
Date Analyzed:	07/02/19	Data File:	070209.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-SW-2:1.0	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-04 1/6
Date Analyzed:	07/02/19	Data File:	070217.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.22

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-SW-3:0.11	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-05 1/6
Date Analyzed:	07/02/19	Data File:	070218.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.22

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-SW-4:0.9	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-06 1/6
Date Analyzed:	07/02/19	Data File:	070219.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.064

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-B-2:1.5	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-07 1/6
Date Analyzed:	07/02/19	Data File:	070237.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-B-3:2.0	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-09 1/6
Date Analyzed:	07/02/19	Data File:	070238.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.024

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-B-4:1.5	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-11 1/6
Date Analyzed:	07/02/19	Data File:	070239.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-SW-5:0.6	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-13 1/6
Date Analyzed:	07/02/19	Data File:	070240.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.053

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-SW-6:1.1	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-14 1/6
Date Analyzed:	07/02/19	Data File:	070241.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-SW-7:0.6	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	06/28/19	Lab ID:	906565-15 1/6
Date Analyzed:	06/29/19	Data File:	062930.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.082
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-B-5:1	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-16 1/6
Date Analyzed:	07/02/19	Data File:	070242.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-SW-8:0.7	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-18 1/6
Date Analyzed:	07/02/19	Data File:	070243.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-B-6:1.5	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-19 1/6
Date Analyzed:	07/02/19	Data File:	070244.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-B-7:1.5	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-21 1/6
Date Analyzed:	07/02/19	Data File:	070245.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-B-9:1.5	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-23 1/6
Date Analyzed:	07/02/19	Data File:	070246.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-B-8:1.5	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-25 1/6
Date Analyzed:	07/02/19	Data File:	070247.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-B-11:1.5	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-27 1/6
Date Analyzed:	07/02/19	Data File:	070248.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-B-10:1.5	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-29 1/6
Date Analyzed:	07/03/19	Data File:	070250.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-1:1.2	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-31 1/60
Date Analyzed:	07/04/19	Data File:	070356.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85 d	50	150
DBC	103 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	2.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-2:0.8	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	06/28/19	Lab ID:	906565-32 1/6
Date Analyzed:	06/29/19	Data File:	062931.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.39
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.65 ve
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-2:0.8	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	06/28/19	Lab ID:	906565-32 1/60
Date Analyzed:	07/02/19	Data File:	070215.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.1
gamma-BHC (Lindane)	<0.1
beta-BHC	<0.1
delta-BHC	0.45
Heptachlor	<0.1
Aldrin	<0.1
Heptachlor Epoxide	<0.1
trans-Chlordane	<0.1
cis-Chlordane	<0.1
4,4'-DDE	<0.1
Endosulfan I	<0.1
Dieldrin	0.66
Endrin	<0.1
4,4'-DDD	<0.1
Endosulfan II	<0.1
4,4'-DDT	<0.1 ca
Endrin Aldehyde	<0.1
Methoxychlor	<0.1
Endosulfan Sulfate	<0.1
Endrin Ketone	<0.1
Toxaphene	<10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-3:0.6	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-33 1/6
Date Analyzed:	07/03/19	Data File:	070252.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	109	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.40

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-4:0.8	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-34 1/6
Date Analyzed:	07/03/19	Data File:	070253.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	108	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.40

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-1:1	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-35 1/6
Date Analyzed:	07/02/19	Data File:	070212.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-5:0.8	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-37 1/6
Date Analyzed:	07/03/19	Data File:	070255.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.016

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-6:1.4	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-38 1/6
Date Analyzed:	07/03/19	Data File:	070256.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.017

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-2:1.5	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-39 1/6
Date Analyzed:	07/03/19	Data File:	070257.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-7:1.2	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-41 1/6
Date Analyzed:	07/03/19	Data File:	070258.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.036

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-3:1.5	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-42 1/6
Date Analyzed:	07/03/19	Data File:	070259.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	55	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-36	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-44 1/6
Date Analyzed:	07/03/19	Data File:	070260.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-37	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-45 1/6
Date Analyzed:	07/03/19	Data File:	070261.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-4:1.5	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-46 1/6
Date Analyzed:	07/03/19	Data File:	070262.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-9:2.0	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-48 1/6
Date Analyzed:	07/03/19	Data File:	070335.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-5:1.5	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-50 1/6
Date Analyzed:	07/03/19	Data File:	070336.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	56	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-6:1.5	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-52 1/6
Date Analyzed:	07/03/19	Data File:	070337.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-35	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-54 1/6
Date Analyzed:	07/03/19	Data File:	070338.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-34	Client:	Environmental Partners
Date Received:	06/27/19	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	906565-55 1/6
Date Analyzed:	07/03/19	Data File:	070338A.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	09-1554 mb 1/6
Date Analyzed:	07/02/19	Data File:	070208.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	07/01/19	Lab ID:	09-1556 mb 1/6
Date Analyzed:	07/02/19	Data File:	070236.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 906565
Date Extracted:	06/28/19	Lab ID:	09-1551 mb 1/6
Date Analyzed:	06/29/19	Data File:	062912.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	106	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/09/19

Date Received: 06/27/19

Project: Brookdale 74001.1, F&BI 906565

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906565-35 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	77	77	45-130	0

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	104	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/09/19

Date Received: 06/27/19

Project: Brookdale 74001.1, F&BI 906565

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 906565-02 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	98	94	45-130	4

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	107	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/09/19

Date Received: 06/27/19

Project: Brookdale 74001.1, F&BI 906565

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR ORGANOCHLORINE PESTICIDES BY EPA METHOD 8081B

Laboratory Code: 906520-02 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	<0.01	72	74	45-111	3
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	<0.01	79	81	50-117	2
beta-BHC	mg/kg (ppm)	0.1	<0.01	84	86	49-109	2
delta-BHC	mg/kg (ppm)	0.1	0.010	78	81	39-114	4
Heptachlor	mg/kg (ppm)	0.1	<0.01	87	90	40-131	3
Aldrin	mg/kg (ppm)	0.1	<0.01	79	82	44-121	4
Heptachlor Epoxide	mg/kg (ppm)	0.1	<0.01	81	84	46-122	4
trans-Chlordane	mg/kg (ppm)	0.1	<0.01	83	87	41-129	5
cis-Chlordane	mg/kg (ppm)	0.1	<0.01	90	93	44-120	3
4,4'-DDE	mg/kg (ppm)	0.1	<0.01	79	83	50-150	5
Endosulfan I	mg/kg (ppm)	0.1	<0.01	81	84	45-124	4
Dieldrin	mg/kg (ppm)	0.1	<0.01	86	90	45-130	5
Endrin	mg/kg (ppm)	0.1	<0.01	102	105	50-140	3
4,4'-DDD	mg/kg (ppm)	0.1	<0.01	95	99	26-155	4
Endosulfan II	mg/kg (ppm)	0.1	<0.01	79	83	40-135	5
4,4'-DDT	mg/kg (ppm)	0.1	<0.01	92	95	50-150	3
Endrin Aldehyde	mg/kg (ppm)	0.1	<0.01	74	71	35-139	4
Methoxychlor	mg/kg (ppm)	0.1	<0.01	99	104	28-162	5
Endosulfan Sulfate	mg/kg (ppm)	0.1	<0.01	88	91	40-141	3
Endrin Ketone	mg/kg (ppm)	0.1	<0.01	92	95	41-147	3
Toxaphene	mg/kg (ppm)	4	<1	84	93	50-150	10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/09/19

Date Received: 06/27/19

Project: Brookdale 74001.1, F&BI 906565

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
alpha-BHC	mg/kg (ppm)	0.1	90	56-113
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	96	58-120
beta-BHC	mg/kg (ppm)	0.1	100	70-130
delta-BHC	mg/kg (ppm)	0.1	104	70-130
Heptachlor	mg/kg (ppm)	0.1	104	56-124
Aldrin	mg/kg (ppm)	0.1	99	70-130
Heptachlor Epoxide	mg/kg (ppm)	0.1	102	70-130
trans-Chlordane	mg/kg (ppm)	0.1	103	60-123
cis-Chlordane	mg/kg (ppm)	0.1	108	70-130
4,4'-DDE	mg/kg (ppm)	0.1	99	70-130
Endosulfan I	mg/kg (ppm)	0.1	100	62-124
Dieldrin	mg/kg (ppm)	0.1	104	70-130
Endrin	mg/kg (ppm)	0.1	120	56-147
4,4'-DDD	mg/kg (ppm)	0.1	118	54-137
Endosulfan II	mg/kg (ppm)	0.1	100	42-140
4,4'-DDT	mg/kg (ppm)	0.1	113	25-169
Endrin Aldehyde	mg/kg (ppm)	0.1	102	21-135
Methoxychlor	mg/kg (ppm)	0.1	120	54-154
Endosulfan Sulfate	mg/kg (ppm)	0.1	112	39-148
Endrin Ketone	mg/kg (ppm)	0.1	113	46-134
Toxaphene	mg/kg (ppm)	4	98	56-145

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

906565

SAMPLE CHAIN OF CUSTODY

ME 06/27/19

005

Report To: John Mann; Betsy Wing

Company: EPI

Address: 1180 NW Maple St, Suite 310

City, State, ZIP: Issaquah, WA 98027

Phone: 425-345-0010 Email: thom@epi-wa.com
betsy.wing@epi-wa.com

SAMPLES (signature) <u>John Mann</u>		PO #
PROJECT NAME <u>Pyroclastic</u>		14001.1
REMARKS	INVOICE TO <u>Ichijo USA</u>	
TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH <u>1 week TT</u> Rush charges authorized by: _____		
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____		

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-22-SW-1:0.4	01	6/27/19	0818	Soil	1								X
A01-22-B-1:2	02		0815										X
A01-22-B-1:3	03		0823										X
A01-22-SW-2:1.0	04		0826										X
A01-22-SW-3:0.11	05		0832										X
A01-22-SW-4:0.9	06		0840										X
A01-22-B-2:1.5	07		0829										X
A01-22-B-2:2.5	08		0841										X
A01-22-B-3:2.0	09		0846										X
A01-22-B-3:3.0	10		0854										X

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <u>Betsy Wing</u>		Betsy Wing		EPI		6/27/19	1630
Received by: <u>John Mann</u>		John Mann		EPI			
Relinquished by:							
Received by:							

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

Samples received at 4 °C

906565

SAMPLE CHAIN OF CUSTODY

ME 06/27/19

605

Report To Thom Main; Betsy WingCompany EPIAddress 1180 NW Maple St, Suite 310City, State, ZIP Issaquah, WA 98027Phone 425-395-2010 Email thommain@epi-wa.com
betsy@epi-wa.com

SAMPLERS (signature) <u>[Signature]</u>		TURNAROUND TIME Page # <u>2</u> of <u>6</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>14001.1</u>	Standard Turnaround <input type="checkbox"/> RUSH <u>1-2022 741</u>	
REMARKS	INVOICE TO <u>Idrio USA</u>	Rush charges authorized by: <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other	

						ANALYSES REQUESTED								Notes
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM		
A01-22-B-4:1.5	11	6/27/19	0851	soil	1								<input checked="" type="checkbox"/>	method 8081 (Dilution)
A01-22-B-4:2.5	12		0857											method 8081 (Full Suite)
A01-22-SW-5:0.6	13		0928										<input checked="" type="checkbox"/>	
A01-22-SW-6:1.1	14		0940										<input checked="" type="checkbox"/>	
A01-22-SW-7:0.4	15		0952										<input checked="" type="checkbox"/>	
A01-22-B-S:1	16		0941										<input checked="" type="checkbox"/>	
A01-22-B-S:2	17		0953											
A01-22-SW-8:0.7	18		1000										<input checked="" type="checkbox"/>	
A01-22-B-6:1.5	19		1001										<input checked="" type="checkbox"/>	
A01-22-B-6:2.5	20		1013											
														HOLD

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Received by: <u>[Signature]</u>	Received by: <u>Betsy Wing</u>	Samples received at <u>4</u> <u>00</u> <u>00</u>
Relinquished by: <u>[Signature]</u>	Relinquished by: <u>HOOT NQUICK</u>	

906565

SAMPLE CHAIN OF CUSTODY

ME 06/27/19

COS

Report To John Moni Betsy WiegCompany EPIAddress 1180 NW Maple St Suite 310City, State, ZIP Issaquah, WA 98027Phone 425-365-0000 Email John.Moni@epi-wa.com
Betsy.Wieg@epi-wa.com

SAMPLERS (signature) <u>John Moni</u>		Page # <u>3</u> of <u>4</u>
PROJECT NAME <u>Brookdale</u>	PO # <u>74001-1</u>	TURNAROUND TIME <u>1 week</u>
REMARKS <u>Brookdale</u>	INVOICE TO <u>Temco USA</u>	
<input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH <u>1 week</u> Rush charges authorized by: _____		SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-22-B-7:1.5	21	6/27/19	10:00	Soil	1							X	HOLD
A01-22-B-7:2.5	22	10/18	10:18		1							X	HOLD
A01-22-B-9:1.5	23		10:54									X	
A01-22-B-9:2.5	24		11:04										HOLD
A01-22-B-8:1.5	25		10:51									X	
A01-22-B-8:2.5	26		11:03										HOLD
A01-22-B-11:1.5	27		11:12									X	
A01-22-B-11:2.5	28		11:20										HOLD
A01-22-B-10:1.5	29		11:11									X	Label 8-10:2.0
A01-22-B-10:2.5	30		11:19										HOLD

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Received by: <u>Betsy Wieg</u>		Betsy Wieg		EPI		6/27/19		16:30	
Received by: <u>John Moni</u>		John Moni		EPI		✓		✓	
Relinquished by:									
Received by:				Samples received at		4			

906565

SAMPLE CHAIN OF CUSTODY

ME 06/27/19

COS

Report To Theresa Mann, Betsy Wing

Company EPL

Address 1180 NW Maple St Suite 310

City, State, ZIP Issaquah, WA 98037

Phone 425-395-0010 Email theresa.mann@epl-wa.com
betsy.wing@epl-wa.com

SAMPLERS (signature) <u>Theresa Mann</u>	
PROJECT NAME <u>Burnedale</u>	PO # <u>74001-1</u>
REMARKS	INVOICE TO <u>Idaho USA</u>

TURNAROUND TIME Page # <u>4</u> of <u>6</u>
<input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH <u>Woe # 777</u> Rush charges authorized by:
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081 (Preliminary)	method 8081 (Full Suite)		
A01-20-SW-1-1.2	31	6/27/19	1236	Soil	1								X			
A01-20-SW-2-0.8	32		1238											X		
A01-20-SW-3-0.6	33		1248										X			
A01-20-SW-4-0.8	34		1258										X			
A01-20-B-1-1	35		1251										X			
A01-20-B-1-2	36		1257													Hold
A01-20-SW-5-0.8	37		1306										X			
A01-20-SW-6-1.4	38		1318										X			
A01-20-B-2-1.5	39		1307										X			
A01-20-B-2-2.5	40		1313													Hold

SIGNATURE		PRINT NAME		COMPANY	DATE	TIME
Relinquished by: <u>Betsy Wing</u>		Betsy Wing		EPL	6/27/19	6:27:30
Received by: <u>Theresa Mann</u>		Theresa Mann		EPL		
Relinquished by:						
Received by:				Samples received at	40C	

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SAMPLE CHAIN OF CUSTODY

906565

ME 06/27/19 COS

Page # 5 of 6

Report To Thom Marin; Betsy Wing
 Company EPI
 Address 1150 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone 425-395-0010 Email thom@epi-wa.com
betsy@epi-wa.com

SAMPLERS (signature) <u>M. Marin</u>		PO # <u>14001-1</u>
PROJECT NAME <u>Brookdale</u>	INVOICE TO <u>Idigo USA</u>	
REMARKS		

TURNAROUND TIME
SAMPLE DISPOSAL <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>1 week TAT</u> Rush charges authorized by: _____ <input checked="" type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____

						ANALYSES REQUESTED										
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM		Notes		
A01-20-S00-7:1.2	41	6/27/19	1336	Soil	1											
A01-20-B-3-1.5	42		1325										X			
A01-20-B-3-2.5	43		1335													
Dup-310	44												X	HOLD No jarred		
Dup-37	45												X	2 jars need		
A01-20-B-4-1.5	46		1336										X			
A01-20-B-4-2.5	47		1346											HOLD		
A01-20-B-9:2.0	48		1402										X			
A01-20-B-9:3.0	49		1412											HOLD		
A01-20-B-5:1.5	50		1349										X			

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Received by: <u>Betsy Wing</u>		Betsy Wing		EPI		6/27/19	1630
Relinquished by: <u>Thom Marin</u>		Thom Marin		EPI			
Received by:						4	00

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

5

Phone 425-395-0210 Email jaymnd@iwa.co

ANALYSES REQUESTED

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Reinquinished by: <i>[Signature]</i>	BETSY WING	EP1	10/27/17	1630
Received by: <i>[Signature]</i>	HOLLY WING	FBA	✓	✓
Relinquished by:				
Received by:		Samples received at	4 °C	

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 24, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 907001

Dear Mr Morin:

Included are the additional results from the testing of material submitted on July 1, 2019 from the Brookdale 74001.1, F&BI 907001 project. There are 8 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0724R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 1, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 907001 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907001 -01	AOI-20-B-7:1.5
907001 -02	AOI-20-B-7:2.5
907001 -03	Dup-38
907001 -04	AOI-20-B-8:1.5
907001 -05	AOI-20-B-8:2.5
907001 -06	AOI-20-B-10:3
907001 -07	AOI-20-B-10:4
907001 -08	AOI-20-B-11:2
907001 -09	AOI-20-B-11:3
907001 -10	AOI-21-SW-1:1
907001 -11	AOI-21-SW-2:1.5
907001 -12	Dup-39
907001 -13	Dup-40
907001 -14	AOI-21-B-1:1.5
907001 -15	AOI-21-SW-3:1.5
907001 -16	AOI-21-B-1:2.5
907001 -17	AOI-21-SW-4:1.5
907001 -18	AOI-21-B-2:1.5
907001 -19	AOI-21-B-2:2.5
907001 -20	AOI-21-SW-5:1.5
907001 -21	AOI-21-SW-6:0.5
907001 -22	AOI-21-SW-7:1
907001 -23	AOI-21-SW-8:0.3
907001 -24	AOI-21-B-3:1.5
907001 -25	AOI-21-B-4:0.5
907001 -26	AOI-21-B-3:2.5
907001 -27	AOI-21-B-4:1.5
907001 -28	AOI-21-B-6:1.5
907001 -29	AOI-21-B-5:1
907001 -30	AOI-21-B-6:2.5
907001 -31	AOI-21-B-5:2
907001 -32	AOI-21-B-7:1.5
907001 -33	AOI-21-B-7:2.5
907001 -34	AOI-21-B-8:1.5
907001 -35	AOI-21-B-8:2.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (Continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907001 -36	AOI-21-B-9:2
907001 -37	AOI-21-B-9:3
907001 -38	AOI-21-B-10:2
907001 -39	AOI-21-B-10:3
907001 -40	AOI-21-B-11:2
907001 -41	AOI-21-B-11:3
907001 -42	AOI-21-B-12:1.5
907001 -43	AOI-21-B-12:2.5
907001 -44	AOI-20-B-12:1.5
907001 -45	AOI-20-B-12:2.5

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-8:2.5	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/12/19	Lab ID:	907001-05 1/6
Date Analyzed:	07/18/19	Data File:	071814.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	59	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.029

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-11:3	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/12/19	Lab ID:	907001-09 1/60
Date Analyzed:	07/19/19	Data File:	071909.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67 d	50	150
DBC	75 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.72

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-B-4:1.5	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/12/19	Lab ID:	907001-27 1/6
Date Analyzed:	07/18/19	Data File:	071816.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.30

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/12/19	Lab ID:	09-1667 mb 1/6
Date Analyzed:	07/18/19	Data File:	071806.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/24/19

Date Received: 07/01/19

Project: Brookdale 74001.1, F&BI 907001

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907171-49 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent	Percent	Acceptance Criteria	RPD (Limit 20)
				Recovery MS	Recovery MSD		
Dieldrin	mg/kg (ppm)	0.1	0.027	107 b	94 b	45-130	13 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent	Acceptance Criteria
			Recovery LCS	
Dieldrin	mg/kg (ppm)	0.1	86	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

907061

SAMPLE CHAIN OF CUSTODY

ME 07-01-19

1 of 5004

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone Y25-395-0010 Email thom@epi-wa.combetsyw@epi-wa.comSAMPLERS (signature)
PROJECT NAME Brookdale

PO #

74001.1

REMARKS

INVOICE TO
Idigo
USATURNAROUND TIME
of☐ Standard Turnaround
☒ RUSH 1 week

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 Dredging	Method 8081 Full Suite	Notes
A01-20-B-7-1.5	01	6/28/19	0623	Soil	1								X		HOLD
A01-20-B-7-2.5	02		0639		1								X		HOLD
Dup-38	03		—		1								X		
A01-20-B-8-1.5	04		0849		1								X		
A01-20-B-8-2.5	05		0853		1								X		HOLD
A01-20-B-10-3	06		0849		1								X		
A01-20-B-10-4	07		0854		1								X		HOLD
A01-20-B-11-2	08		0903		1								X		HOLD
A01-20-B-11-3	09		0909		1								X		
A01-21-SW-1-1	10		0959		1								X		

SIGNATURE

PRINT NAME

COMPANIES REQUESTED at TIME

Friedman & Bruja, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Received by: Betsy Wing

Betsy Wing

EPI

7/1/19

0632

Received by:

Michael Enick

F&B

1

6

Received by:

SAMPLE CHAIN OF CUSTODY

ME 07-01-19 2 of 5 pg

Report To Thom Morin, Betsy Wing
 Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email thom@epi-wa.com

betsy@epi-wa.com

Samplers (signature)
 PROJECT NAME Brookdale

PO #

REMARKS

74001.1
 INVOICE TO
 Tdrjo
 USA

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 1 week
 Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081 Dieldrin	method 8081 full suite	Notes
A01-21-SW-2:1.5	11	6/28/19	1009	Soil	1								X		
Dup-39	13												X		
Dup-40	13												X		
A01-21-B-1:1.5	14		1018										X		
A01-21-SW-3:1.5	15		1021											X	
A01-21-B-1:2.5	16		1026												HOLD
A01-21-SW-4:1.5	17		1033										X		
A01-21-B-2:1.5	18		1034										X		
A01-21-B-2:2.5	19		1042												HOLD
A01-21-SW-5:1.5	20		1051										X		

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by: Betsy Wing

Betsy Wing

EP1

7/1/19

6:37

Received by:

Michael C. Ali

Fish

Received by:

907001

SAMPLE CHAIN OF CUSTODY

ME 07-01-19 3 of 5 Doc

Report To Thom 1110rin, Betsy Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Tsagusta, WA 98027

Phone 425-395-0000 Email thom1110rin-wa.com

betsyw@ep1-wa.com

SAMPLERS (signature)		Page #
PROJECT NAME	PO #	TURNAROUND TIME
REMARKS	INVOICE TO	
<u>Brookdale</u> <u>Tehijo</u> <u>USA</u>		<input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>1 week</u> Rush charges authorized by:
ANALYSES REQUESTED Method 8081 Dieldrin Method 8081 Fuel Suite		SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 Dieldrin Method 8081 Fuel Suite	Notes
A01-21-SW-6:0.5	21	6/28/19	1059	Soil	1								X	
A01-21-SW-7:1	22		1103										X	
A01-21-SW-8:0.3	23		1111										X	
A01-21-B-3:11.5	24		1126										X	
A01-21-B-4:0.5	25		1133										X	
A01-21-B-3:2.5	26		1134											HOLD
A01-21-B-4:1.5	27		1135											HOLD
A01-21-B-6:1.5	28		1149										X	
A01-21-B-5:1	29		1150										X	
A01-21-B-6:2.5	30		1153											HOLD

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>[Signature]</u> Received by: <u>[Signature]</u>		Relinquished by: <u>Betsy Wing</u> Received by: <u>Michael</u>		Relinquished by: <u>EP1</u> Received by: <u>FUS</u>		Relinquished by: <u>7/1/19</u> Received by: <u>6:32</u>		Relinquished by: <u>6</u> Received by: <u>6</u>	

SAMPLE CHAIN OF CUSTODY

ME 07-01-19 4 of 5-204

Report To Thom Thierin, Betsy Wing
 Company EPI

Address 1180 NW Maple St, Ste 310
 City, State, ZIP Issaquah, WA 98027
 Phone 425-395-0810 Email thom@epi-wa.com
betsy@epi-wa.com

SAMPLES RECEIVED BY <u>Betsy Wing</u>		PO # 74001.1
PROJECT NAME <u>Brookdale</u>	INVOICE TO <u>Ichijo USA</u>	
REMARKS Turnaround time	SAMPLE DISPOSAL <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH Rush charges authorized by:	

						ANALYSES REQUESTED										
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081-Dieldrin	Method 8081-Full Suite	Notes	
A01-21-B-5:2	31	6/28/19	1158	Soil	1								X		HOLD	
A01-21-B-7:1.5	32		1209										X			
A01-21-B-7:2.5	33		1215												HOLD	
A01-21-B-8:1.5	34		1212										X			
A01-21-B-8:2.5	35		1218												HOLD	
A01-21-B-9:2	36		1228										X			
A01-21-B-9:3	37		1234												HOLD	
A01-21-B-10:2	38		1235										X			
A01-21-B-10:3	39		1237												HOLD	
A01-21-B-11:2	40		1240										X			

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029

Pl. (206) 285-8282

Relinquished by: <u>[Signature]</u>	SIGNATURE	PRINT NAME <u>Betsy Wing</u>	COMPANY <u>EPI</u>	DATE 7/1/19	TIME 0632
Received by: <u>[Signature]</u>	SIGNATURE	PRINT NAME <u>Michael</u>	COMPANY <u>Fug</u>	DATE 7/1/19	TIME 0632
Relinquished by: [Blank]	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Received by: [Blank]	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME

ME 07-01-19 5 5 204

Company ET

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email thommas@epi-wa.com

letsyulcepi-wa.com

SAMPLERS (signature)
PROJECT NAME

PO#

REMARKS

INVOICE TO

TURNAROUND TIME
☐ Standard Turnaround
☒ RUSH 1 week
 Rush charges authorized by:
 SAMPLE DISPOSAL
☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

TURNAROUND TIME
Standard Turnaround
SSH 1 week
charges authorized by:
SAMPLE DISPOSAL

[illegible]

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

PRINT NAME

COMPANY

DATE _____

TIME

Relinquished by: 

Betz Win

Er

7/11/13

6637

Received by

Mr. Phil E. Kelly

T-4Bm

2

Relinquished by

1

Received by:

1000 JOURNAL OF CLIMATE

1

1

1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 11, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 907001

Dear Mr Morin:

Included are the results from the testing of material submitted on July 1, 2019 from the Brookdale 74001.1, F&BI 907001 project. There are 39 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0711R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 1, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 907001 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907001 -01	AOI-20-B-7:1.5
907001 -02	AOI-20-B-7:2.5
907001 -03	Dup-38
907001 -04	AOI-20-B-8:1.5
907001 -05	AOI-20-B-8:2.5
907001 -06	AOI-20-B-10:3
907001 -07	AOI-20-B-10:4
907001 -08	AOI-20-B-11:2
907001 -09	AOI-20-B-11:3
907001 -10	AOI-21-SW-1:1
907001 -11	AOI-21-SW-2:1.5
907001 -12	Dup-39
907001 -13	Dup-40
907001 -14	AOI-21-B-1:1.5
907001 -15	AOI-21-SW-3:1.5
907001 -16	AOI-21-B-1:2.5
907001 -17	AOI-21-SW-4:1.5
907001 -18	AOI-21-B-2:1.5
907001 -19	AOI-21-B-2:2.5
907001 -20	AOI-21-SW-5:1.5
907001 -21	AOI-21-SW-6:0.5
907001 -22	AOI-21-SW-7:1
907001 -23	AOI-21-SW-8:0.3
907001 -24	AOI-21-B-3:1.5
907001 -25	AOI-21-B-4:0.5
907001 -26	AOI-21-B-3:2.5
907001 -27	AOI-21-B-4:1.5
907001 -28	AOI-21-B-6:1.5
907001 -29	AOI-21-B-5:1
907001 -30	AOI-21-B-6:2.5
907001 -31	AOI-21-B-5:2
907001 -32	AOI-21-B-7:1.5
907001 -33	AOI-21-B-7:2.5
907001 -34	AOI-21-B-8:1.5
907001 -35	AOI-21-B-8:2.5
907001 -36	AOI-21-B-9:2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907001 -37	AOI-21-B-9:3
907001 -38	AOI-21-B-10:2
907001 -39	AOI-21-B-10:3
907001 -40	AOI-21-B-11:2
907001 -41	AOI-21-B-11:3
907001 -42	AOI-21-B-12:1.5
907001 -43	AOI-21-B-12:2.5
907001 -44	AOI-20-B-12:1.5
907001 -45	AOI-20-B-12:2.5

The 8081B calibration standard failed the acceptance criteria for several pesticides. The data were flagged accordingly.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-7:1.5	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-01 1/6
Date Analyzed:	07/03/19	Data File:	070329.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-38	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-03 1/6
Date Analyzed:	07/03/19	Data File:	070339.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-8:1.5	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-04 1/6
Date Analyzed:	07/03/19	Data File:	070340.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.066

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-10:3	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-06 1/6
Date Analyzed:	07/03/19	Data File:	070341.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-11:2	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-08 1/60
Date Analyzed:	07/10/19	Data File:	070951.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78 d	50	150
DBC	105 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.78

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-SW-1:1	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-10 1/6
Date Analyzed:	07/03/19	Data File:	070343.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-SW-2:1.5	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-11 1/6
Date Analyzed:	07/03/19	Data File:	070345.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-39	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-12 1/6
Date Analyzed:	07/03/19	Data File:	070346.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-40	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-13 1/6
Date Analyzed:	07/03/19	Data File:	070347.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-B-1:1.5	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-14 1/6
Date Analyzed:	07/03/19	Data File:	070348.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-SW-3:1.5	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/03/19	Lab ID:	907001-15 1/6
Date Analyzed:	07/08/19	Data File:	070840.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-SW-4:1.5	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-17 1/6
Date Analyzed:	07/03/19	Data File:	070349.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-B-2:1.5	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-18 1/6
Date Analyzed:	07/03/19	Data File:	070350.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-SW-5:1.5	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-20 1/6
Date Analyzed:	07/03/19	Data File:	070351.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-SW-6:0.5	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/03/19	Lab ID:	907001-21 1/6
Date Analyzed:	07/08/19	Data File:	070841.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.064
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-SW-7:1	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-22 1/60
Date Analyzed:	07/10/19	Data File:	070952.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63 d	50	150
DBC	120 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-SW-8:0.3	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-23 1/6
Date Analyzed:	07/04/19	Data File:	070353.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.029

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-B-3:1.5	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-24 1/6
Date Analyzed:	07/04/19	Data File:	070354.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-B-4:0.5	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-25 1/6
Date Analyzed:	07/04/19	Data File:	070355.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.090

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-B-6:1.5	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-28 1/6
Date Analyzed:	07/05/19	Data File:	070506.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-B-5:1	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-29 1/6
Date Analyzed:	07/05/19	Data File:	070507.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-B-7:1.5	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-32 1/6
Date Analyzed:	07/05/19	Data File:	070508.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-B-8:1.5	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-34 1/6
Date Analyzed:	07/03/19	Data File:	070332.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-B-9:2	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-36 1/6
Date Analyzed:	07/05/19	Data File:	070509.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-B-10:2	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-38 1/6
Date Analyzed:	07/05/19	Data File:	070510.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-B-11:2	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/03/19	Lab ID:	907001-40 1/6
Date Analyzed:	07/08/19	Data File:	070842.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-B-12:1.5	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-42 1/6
Date Analyzed:	07/05/19	Data File:	070511.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-12:1.5	Client:	Environmental Partners
Date Received:	07/01/19	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	907001-44 1/6
Date Analyzed:	07/05/19	Data File:	070512.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	58	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	09-1568 mb 1/6
Date Analyzed:	07/03/19	Data File:	070325.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/02/19	Lab ID:	09-1569 mb 1/6
Date Analyzed:	07/03/19	Data File:	070326.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907001
Date Extracted:	07/03/19	Lab ID:	09-1604 mb 1/6
Date Analyzed:	07/08/19	Data File:	070832.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/11/19

Date Received: 07/01/19

Project: Brookdale 74001.1, F&BI 907001

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907001-34 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	117	109	45-130	7

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	73	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/11/19

Date Received: 07/01/19

Project: Brookdale 74001.1, F&BI 907001

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907001-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	90	77	45-130	16

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	104	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/11/19

Date Received: 07/01/19

Project: Brookdale 74001.1, F&BI 907001

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR ORGANOCHLORINE PESTICIDES BY EPA METHOD 8081B

Laboratory Code: 907024-48 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	<0.01	85	90	45-111	6
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	<0.01	91	98	50-117	7
beta-BHC	mg/kg (ppm)	0.1	<0.01	91	97	49-109	6
delta-BHC	mg/kg (ppm)	0.1	0.017	82	92	39-114	11
Heptachlor	mg/kg (ppm)	0.1	<0.01	99	107	40-131	8
Aldrin	mg/kg (ppm)	0.1	<0.01	91	97	44-121	6
Heptachlor Epoxide	mg/kg (ppm)	0.1	<0.01	94	101	46-122	7
trans-Chlordane	mg/kg (ppm)	0.1	<0.01	93	100	41-129	7
cis-Chlordane	mg/kg (ppm)	0.1	<0.01	96	103	44-120	7
4,4'-DDE	mg/kg (ppm)	0.1	<0.01	87	93	50-150	7
Endosulfan I	mg/kg (ppm)	0.1	<0.01	90	95	45-124	5
Dieldrin	mg/kg (ppm)	0.1	<0.01	92	101	45-130	9
Endrin	mg/kg (ppm)	0.1	<0.01	108	117	50-140	8
4,4'-DDD	mg/kg (ppm)	0.1	<0.01	118	129	26-155	9
Endosulfan II	mg/kg (ppm)	0.1	<0.01	89	96	40-135	8
4,4'-DDT	mg/kg (ppm)	0.1	<0.01	73	73	50-150	0
Endrin Aldehyde	mg/kg (ppm)	0.1	<0.01	90	94	35-139	4
Methoxychlor	mg/kg (ppm)	0.1	<0.01	87	90	28-162	3
Endosulfan Sulfate	mg/kg (ppm)	0.1	<0.01	95	102	40-141	7
Endrin Ketone	mg/kg (ppm)	0.1	<0.01	97	104	41-147	7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/11/19

Date Received: 07/01/19

Project: Brookdale 74001.1, F&BI 907001

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907024-27 1/6 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Toxaphene	mg/kg (ppm)	4	<1	94	91	50-150	3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/11/19

Date Received: 07/01/19

Project: Brookdale 74001.1, F&BI 907001

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
alpha-BHC	mg/kg (ppm)	0.1	92	56-113
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	98	58-120
beta-BHC	mg/kg (ppm)	0.1	101	70-130
delta-BHC	mg/kg (ppm)	0.1	102	70-130
Heptachlor	mg/kg (ppm)	0.1	108	56-124
Aldrin	mg/kg (ppm)	0.1	100	70-130
Heptachlor Epoxide	mg/kg (ppm)	0.1	103	70-130
trans-Chlordane	mg/kg (ppm)	0.1	102	60-123
cis-Chlordane	mg/kg (ppm)	0.1	105	70-130
4,4'-DDE	mg/kg (ppm)	0.1	96	70-130
Endosulfan I	mg/kg (ppm)	0.1	100	62-124
Dieldrin	mg/kg (ppm)	0.1	104	70-130
Endrin	mg/kg (ppm)	0.1	116	56-147
4,4'-DDD	mg/kg (ppm)	0.1	133	54-137
Endosulfan II	mg/kg (ppm)	0.1	100	42-140
4,4'-DDT	mg/kg (ppm)	0.1	76	25-169
Endrin Aldehyde	mg/kg (ppm)	0.1	92	21-135
Methoxychlor	mg/kg (ppm)	0.1	88	54-154
Endosulfan Sulfate	mg/kg (ppm)	0.1	106	39-148
Endrin Ketone	mg/kg (ppm)	0.1	109	46-134
Toxaphene	mg/kg (ppm)	4	100	56-145

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

907001

SAMPLE CHAIN OF CUSTODY

ME 07-01-19

1 of 5004

Report To Thom Morin; Betsy Wing

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email thom@epi-wa.com
betsyw@epi-wa.com

SAMPLES Signature
PROJECT NAME Brookdale

PO # 74001.1

REMARKS

INVOICE TO Idaho USA

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 1 week

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 Dieldrin	Method 8081 Full Suite	Notes
A01-20-B-7:1.5	01	6/28/19	0823	Soil	1								X		HOLD
A01-20-B-7:2.5	02		0839		1								X		HOLD
Dup-38	03												X		
A01-20-B-8:1.5	04		0849										X		
A01-20-B-8:2.5	05		0853												HOLD
A01-20-B-10:3	06		0848										X		HOLD
A01-20-B-10:4	07		0854												HOLD
A01-20-B-11:2	08		0903										X		HOLD
A01-20-B-11:3	09		0909												HOLD
A01-21-SW-1:1	10		0959										X		

SIGNATURE

PRINT NAME

COMPANIES Signature received at _____

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Received by: Betsy Wing

Received by: Michael Erick

Relinquished by: _____

Received by: _____

SAMPLE CHAIN OF CUSTODY

ME 07-01-19 2 of 5 pgs

Report To: Thom Morin; Betsy Wingo
 Company: EP1

Address: 1180 NW Maple St, Ste 310

City, State, ZIP: Issaquah WA 98027

Phone: 425-395-0010 Email: thom@epi-wa.com
betsy@epi-wa.com

SAMPLES (signature)
Betsy Wingo

PROJECT NAME: Brookdale

PO #: 74001.1

REMARKS

INVOICE TO
Tdrio
USA

TURNAROUND TIME
 Page # 2 of 5
☐ Standard Turnaround
☒ RUSH 1 week
 Rush charges authorized by: _____

ANALYSES REQUESTED

TPH-HCID
 TPH-Diesel
 TPH-Gasoline
 BTEX by 8021B
 VOCs by 8260C
 SVOCs by 8270D
 PAHs 8270D SIM
 Method 8081
Dieldrin
 Method 8081
Full Suite

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081	Method 8081	Notes
A01-21-SW-2:1.5	11	6/28/19	1009	Soil	1								X		
Dup-39	13												X		
Dup-40	13												X		
A01-21-B-1:1.5	14												X		
A01-21-SW-3:1.5	15													X	
A01-21-B-1:2.5	16														HOLD
A01-21-SW-4:1.5	17												X		
A01-21-B-2:1.5	18												X		
A01-21-B-2:2.5	19														HOLD
A01-21-SW-5:1.5	20												X		

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029

Relinquished by: Betsy Wingo

Relinquished by: Betsy Wingo

Relinquished by: Michael C. Ali

Relinquished by: EP1

Relinquished by: 7/1/19 0632

Ph. (206) 285-8282

Received by:

Received by:

Received by:

Received by:

Received by:

SAMPLE CHAIN OF CUSTODY

ME 07-01-19 3 of 5 Day

SAMPLERS (signature)

Report To Thom Thorma Betsy Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Tsaguya, WA 98027

Phone 425-395-0000 Email thom@ep1-wa.com

betsyw@ep1-wa.com

PROJECT NAME <u>Brookdale</u>		PO # <u>74081.1</u>
REMARKS <u>Idrigo USA</u>	INVOICE TO	
<input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>1 week</u> Rush charges authorized by: _____ SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____		

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 Dieldrin Method 8081 Full Suite	Notes
A01-21-SW-6:0.5	21	6/28/19	1059	Soil	1								X	
A01-21-SW-7:1	22		1103										X	
A01-21-SW-8:0.3	23		1111										X	
A01-21-B-3:1.5	24		1126										X	
A01-21-B-4:0.5	25		1133										X	
A01-21-B-3:2.5	26		1134											HOLD
A01-21-B-4:1.5	27		1135											HOLD
A01-21-B-6:1.5	28		1149										X	
A01-21-B-5:1	29		1150										X	
A01-21-B-6:2.5	30		1153											HOLD

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: <u>Betsy Wing</u>	Relinquished by: <u>Betsy Wing</u>	Relinquished by: <u>Michael Elrod</u>	Relinquished by: <u>Michael Elrod</u>
Received by:	Received by:	Received by:	Received by:

SAMPLE CHAIN OF CUSTODY

ME 07-01-19

4 of 5 Pgs

Report To Thom Hornin, Betsy Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Tussock, WA 98227

Phone 425-375-0410 Email thom@ep1-wa.com

betsy@ep1-wa.com

SAMPLES (signature) Betsy Wing

PROJECT NAME

PO #

REMARKS

Brookdale

74001.1

INVOICE TO

Ichigo USA

TURNAROUND TIME

☐ Standard Turnaround

☒ Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other

ANALYSES REQUESTED

TPH-HCID
TPH-Diesel
TPH-Gasoline
BTEX by 8021B
VOCs by 8260C
SVOCs by 8270D
PAHs 8270D SIM
Method 8081-Distillation
Method 8081-Full Suite

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-21-B-5:2	31	10/28/19	1158	soil	1							X	HOLD
A01-21-B-7:1.5	32		1209									X	
A01-21-B-7:2.5	33		1215									X	HOLD
A01-21-B-8:1.5	34		1212									X	
A01-21-B-8:2.5	35		1218										HOLD
A01-21-B-9:2	36		1228									X	
A01-21-B-9:3	37		1234										HOLD
A01-21-B-10:2	38		1235									X	
A01-21-B-10:3	39		1237										HOLD
A01-21-B-11:2	40		1240									X	

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: <u>Betsy Wing</u>	Received by: <u>Michael</u>
Relinquished by: <u>Michael</u>	Received by: <u>Michael</u>

51 57 204

907001

Report To Thom Moran; Betty Wang

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 415-395-0010 Email flamingoapi@vta.com

butsynt@epi-wa.com

SAMPLERS (signature)
PROJECT NAME

PO #

74001.1

INVOICE TO

July 25th

Page # 5 of —
TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 1 week

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other _____

ANALYSES REQUESTED

[illegible]

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

~~SIGNATURE~~

PRINT NAME

COMPANY

DATE _____

TIME

Requisitioned by:

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Received by:

1000

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<p> <input type="checkbox"/> Male <input type="checkbox"/> Female </p>	<p> <input type="checkbox"/> Male <input type="checkbox"/> Female </p>
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Relinquished by:

0 1372-1000

55

Received by:

1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 12, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 907024

Dear Mr Morin:

Included are the additional results from the testing of material submitted on July 2, 2019 from the Brookdale 74001.1, F&BI 907024 project. There are 6 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0812R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 2, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 907024 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907024 -01	AOI-23-SW-1:1
907024 -02	AOI-23-SW-8:0.5
907024 -03	AOI-23-SW-2:2
907024 -04	AOI-23-SW-7:0.5
907024 -05	AOI-23-SW-3:0.5
907024 -06	AOI-23-SW-6:0.5
907024 -07	AOI-23-SW-4:0.3
907024 -08	AOI-23-SW-5:0.5
907024 -09	AOI-23-B-1:1
907024 -10	AOI-23-B-1:2
907024 -11	AOI-23-B-16:1
907024 -12	AOI-23-B-2:2
907024 -13	AOI-23-B-16:2
907024 -14	AOI-23-B-2:3
907024 -15	AOI-23-B-15:1
907024 -16	AOI-23-B-15:2
907024 -17	AOI-23-B-3:1
907024 -18	AOI-23-B-3:2
907024 -19	Dup-41
907024 -20	Dup-42
907024 -21	AOI-23-B-14:1
907024 -22	AOI-23-B-14:2
907024 -23	AOI-23-B-4:1
907024 -24	AOI-23-B-13:1
907024 -25	AOI-23-B-4:2
907024 -26	AOI-23-B-13:2
907024 -27	AOI-23-B-12:1
907024 -28	AOI-23-B-12:2
907024 -29	AOI-23-B-11:1
907024 -30	AOI-23-B-5:1.5
907024 -31	AOI-23-B-11:2
907024 -32	AOI-23-B-5:2.5
907024 -33	Dup-43
907024 -34	AOI-23-B-10:1
907024 -35	AOI-23-B-6:0.5
907024 -36	AOI-23-B-10:2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907024 -37	AOI-23-B-6:1.5
907024 -38	AOI-23-B-9:1
907024 -39	AOI-23-B-7:1
907024 -40	AOI-23-B-7:2
907024 -41	AOI-23-B-9:2
907024 -42	AOI-23-B-8:2
907024 -43	AOI-23-B-8:3
907024 -44	AOI-18-SW-5:1
907024 -45	AOI-18-SW-1:0.5
907024 -46	AOI-18-SW-6:1
907024 -47	AOI-18-SW-2:1
907024 -48	AOI-18-SW-7:0.5
907024 -49	AOI-18-SW-3:0.5
907024 -50	AOI-18-SW-4:1
907024 -51	AOI-18-B-1:1.5
907024 -52	AOI-18-B-1:2.5
907024 -53	AOI-18-B-5:1
907024 -54	AOI-18-B-2:2
907024 -55	AOI-18-B-2:3
907024 -56	AOI-18-B-3:2
907024 -57	AOI-18-B-5:2
907024 -58	AOI-18-B-3:3
907024 -59	Dup-44
907024 -60	AOI-18-B-4:1.5
907024 -61	AOI-18-B-4:2.5
907024 -62	AOI-18-B-6:2
907024 -63	AOI-18-B-6:3

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-3:2	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1, F&BI 907024
Date Extracted:	08/07/19	Lab ID:	907024-18 1/6
Date Analyzed:	08/07/19	Data File:	080719.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.040

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907024
Date Extracted:	08/07/19	Lab ID:	09-1932 mb 1/6
Date Analyzed:	08/07/19	Data File:	080706.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	105	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/12/19

Date Received: 07/02/19

Project: Brookdale 74001.1, F&BI 907024

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908015-02 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	86	86	45-130	0

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

ME 07-02-19

Page # 1 of 7 nos

SAMPLERS (signature)

PROJECT NAME

PO #

Report To: Thom Mann; Betsy Wing
Company: EPI
Address: 1180 NW Maple St, Ste 310

Brookdale

74001.1

REMARKS

INVOICE TO

City, State, ZIP: Tacoma, WA 98027
Phone: 425-395-0010 Email: thom@epi-wa.com

usaf

usaf

TURNAROUND TIME
☐ Standard Turnaround
☒ RUSH ~~10 day~~ 10 day
Rush charges authorized by: _____
SAMPLE DISPOSAL
☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

askyue@epi-wa.com

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081	Method 8082	Method 8083	Notes
A01-23-SW-1:1	01	7/1/19	0835	Soil	1								X			pe BW
A01-23-SW-8:0.5	02		0840										X			7/10/19 ME
A01-23-SW-2:2	03		0845										X			
A01-23-SW-7:0.5	04		0852										X			
A01-23-SW-3:0.5	05		0855										X			
A01-23-SW-6:0.5	06		0858										X			
A01-23-SW-4:0.3	07		0901										X			
A01-23-SW-5:0.5	08		0902										X			
A01-23-B-1:1	09		0919										X			
A01-23-B-1:2	10		0921										X			#OLD

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Betsy Wing

EPI

7/1/19

0616

Received by:

Michael Cell

FRK

7/2/19

1

Friedman & Bruy, Inc.
3012 16th Avenue West
Seattle, WA 98119-2039
Ph: (206) 285-8282

Received by:

Samples received at 200

SAMPLE CHAIN OF CUSTODY

ME 07-02-19

2 of 7 pgs

Report To Thom Moran, Betsy Wing

Company ERI

Address 1180 NW Maple St. Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 253-395-0000 Email thom@epi-wa.com
betsy@epi-wa.com

SAMPLES (signature) Betsy Wing
PROJECT NAME Brookdale

PO # 74001.1

REMARKS

INVOICE TO Tenjo USA

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 10 day
Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Karolive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 - Dieldrin	Method 8081 - Fuel Fuitt	Notes
A01-23-B-16:1	11	7/11/19	0926	Soil	1										pc BL 8/6/19 ME
A01-23-B-2:2	12		0929												
A01-23-B-16:2	13		0930												HOLD
A01-23-B-2:3	14		0935												HOLD
A01-23-B-15:1	15		0938												
A01-23-B-15:2	16		0942												HOLD
A01-23-B-3:1	17		0947												
A01-23-B-3:2	18		0949												HOLD
Dup-41	19														
Dup-42	20														

Friedman & Bryna, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>Betsy Wing</u>	Betsy Wing	ERI	7/11/19	0615
<u>Michele E. Lind</u>	Michele E. Lind	ERI	7/11/19	0615
Relinquished by:				
Received by:				

907024

SAMPLE CHAIN OF CUSTODY

ME 07-02-19

Page # 3 of 7

Report To: Thom Morn; Betsy Wing

Company: EP1

Address: 1180 NW Maple St, Ste 310

City, State, ZIP: Issaquah, WA 98027

Phone: 425-395-0810 Email: thom@epi-usa.com

betsy@epi-usa.com

SAMPLE ID: 907024
PROJECT NAME: Brookdale

PO #

REMARKS: Brookdale

INVOICE TO: Idrijo

USA

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 10 day
Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

TPH-HCID
TPH-Diesel
TPH-Gasoline
BTEX by 8021B
VOCs by 8260C
SVOCs by 8270D
PAHs 8270D SIM
Method 801
Method 801
Method 801

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-23-B-14:1	21	7/11/19	0950	Soil	1								HOLD
A01-23-B-14:2	22		0954										HOLD
A01-23-B-4:1	23		1013										
A01-23-B-13:1	24		1014										
A01-23-B-4:2	25		1017										HOLD
A01-23-B-13:2	26		1018										HOLD
A01-23-B-12:1	27		1024										
A01-23-B-12:2	28		1028										HOLD
A01-23-B-11:1	29		1046										
A01-23-B-5:1.5	30		1049										

Friedman & Bryne, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-3282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>Betsy Wing</u>	Betsy Wing	EP1	7/12/19	0915
<u>Michael E. Ellis</u>	Michael E. Ellis	Idrijo	7/12/19	
Received by:				

SAMPLE CHAIN OF CUSTODY

907074

ME 07-02-19 4 of 7 nos

Report To: Thom Norton; Betsy Wing

Company: EP1

Address: 1188 NW Maple St SE, Ste 310

City, State, ZIP: Issaquah, WA 98027

Phone: 425-345-0010 Email: thom@ep1-wa.com

SAMPLERS (signature)
Betsy Wing
PROJECT NAME

PO #

REMARKS
Brookdale

INVOICE TO
Idigo USA

TURNAROUND TIME
4

☐ Standard Turnaround
☒ RUSH 10 day
Rush charges authorized by: _____

SAMPLE DISPOSAL
☐ Dispose after 90 days
☒ Archive Samples
☐ Other _____

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SEM	Notes
AD1-23-B-11:2	31	7/1/19	1050	Soil	1								HOLD
AD1-23-B-5:2.5	32		1051										HOLD
Dup-43	33												
AD1-23-B-10:1	34		1142										
AD1-23-B-6:0.5	35		1145										
AD1-23-B-10:2	36		1148										HOLD
AD1-23-B-6:1.5	37		1149										HOLD
AD1-23-B-9:1	38		1158										
AD1-23-B-7:1	39		1201										
AD1-23-B-7:2	40		1203										HOLD

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

Requested by: <u>Betsy Wing</u>	PRINT NAME <u>Betsy Wing</u>	COMPANY <u>EP1</u>	DATE <u>7/2/19</u>	TIME <u>0615</u>
Received by: <u>Michael E. Ull</u>				
Relinquished by:				
Received by:				

707074

SAMPLE CHAIN OF CUSTODY

ME 03-02-19 5 of 7 ps

Report To: Tom Menn, Betsy Wing

Company: EP1

Address: 180 NW Maple St, Ste 310

City, State, ZIP: Bismarck, ND 58007

Phone: 705-365-5610 Email: tom@epi-wa.com

PROJECT NAME: Brockdale

PO #

74001.1

REMARKS

INVOICE TO
Idwip
USA

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 10 day
Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SEM	Notes
A01-23-B-9:2	41	7/1/19	1204	Soil	1								HOLD
A01-23-B-8:2	42		1207										
A01-23-B-8:3	43		1211										HOLD
A01-18-SW-5:1	44		1300										
A01-18-SW-1:0.5	45		1303										
A01-18-SW-6:1	46		1304										
A01-18-SW-2:1	47		1305										
A01-18-SW-7:0.5	48		1308										
A01-18-SW-3:0.5	49		1309										
A01-18-SW-4:1	50		1310										

Friedman & Brugg, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (306) 285-8232

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>Betsy Wing</u>	Betsy Wing	EP1	7/2/19	06:00
<u>Michael E. Ch</u>	Michael E. Ch	EP1	7/2/19	1
Received by:				

SAMPLE CHAIN OF CUSTODY

ME 07-02-19 6 of 7 ps

Send Report To Thom Morin; Betsy Wing

Company Environmental Partners, Inc.

Address 1180 NW Maple St Suite 310

City, State, ZIP Issaquah, WA 98027

Phone # (425) 395-0010 Fax # (425) 395-0011

email: thom@epi-usa.com

SAMPLE # 74001.1
PROJECT NAME/NO. Brookdale
PO# 74001.1

REMARKS

Invoice to: Idaho USA

TURNAROUND TIME
☐ Standard (2 Weeks)
☒ RUSH 10 day
Rush charges authorized by _____

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Method 8081	Notes
A01-18-B-1:1.5	57	7/1/19	1325	Soil	1							X	HOLD
A01-18-B-1:2.5	58		1329									X	HOLD
A01-18-B-5:1	53		1336									X	HOLD
A01-18-B-2:2	54		1337									X	HOLD
A01-18-B-2:3	55		1341									X	HOLD
A01-18-B-3:2	56		1345									X	HOLD
A01-18-B-5:2	57		1346									X	HOLD
A01-18-B-3:3	58		1349									X	HOLD
Dup-44	59											X	HOLD
A01-18-B-4:1.5	60		1354									X	HOLD

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

Requested by: <u>Betsy Wing</u>	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Betsy Wing</u>					
Received by:					

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 6, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 907024

Dear Mr Morin:

Included are the additional results from the testing of material submitted on July 2, 2019 from the Brookdale 74001.1, F&BI 907024 project. There are 17 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0806R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 2, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 907024 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907024 -01	AOI-23-SW-1:1
907024 -02	AOI-23-SW-8:0.5
907024 -03	AOI-23-SW-2:2
907024 -04	AOI-23-SW-7:0.5
907024 -05	AOI-23-SW-3:0.5
907024 -06	AOI-23-SW-6:0.5
907024 -07	AOI-23-SW-4:0.3
907024 -08	AOI-23-SW-5:0.5
907024 -09	AOI-23-B-1:1
907024 -10	AOI-23-B-1:2
907024 -11	AOI-23-B-16:1
907024 -12	AOI-23-B-2:2
907024 -13	AOI-23-B-16:2
907024 -14	AOI-23-B-2:3
907024 -15	AOI-23-B-15:1
907024 -16	AOI-23-B-15:2
907024 -17	AOI-23-B-3:1
907024 -18	AOI-23-B-3:2
907024 -19	Dup-41
907024 -20	Dup-42
907024 -21	AOI-23-B-14:1
907024 -22	AOI-23-B-14:2
907024 -23	AOI-23-B-4:1
907024 -24	AOI-23-B-13:1
907024 -25	AOI-23-B-4:2
907024 -26	AOI-23-B-13:2
907024 -27	AOI-23-B-12:1
907024 -28	AOI-23-B-12:2
907024 -29	AOI-23-B-11:1
907024 -30	AOI-23-B-5:1.5
907024 -31	AOI-23-B-11:2
907024 -32	AOI-23-B-5:2.5
907024 -33	Dup-43
907024 -34	AOI-23-B-10:1
907024 -35	AOI-23-B-6:0.5
907024 -36	AOI-23-B-10:2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907024 -37	AOI-23-B-6:1.5
907024 -38	AOI-23-B-9:1
907024 -39	AOI-23-B-7:1
907024 -40	AOI-23-B-7:2
907024 -41	AOI-23-B-9:2
907024 -42	AOI-23-B-8:2
907024 -43	AOI-23-B-8:3
907024 -44	AOI-18-SW-5:1
907024 -45	AOI-18-SW-1:0.5
907024 -46	AOI-18-SW-6:1
907024 -47	AOI-18-SW-2:1
907024 -48	AOI-18-SW-7:0.5
907024 -49	AOI-18-SW-3:0.5
907024 -50	AOI-18-SW-4:1
907024 -51	AOI-18-B-1:1.5
907024 -52	AOI-18-B-1:2.5
907024 -53	AOI-18-B-5:1
907024 -54	AOI-18-B-2:2
907024 -55	AOI-18-B-2:3
907024 -56	AOI-18-B-3:2
907024 -57	AOI-18-B-5:2
907024 -58	AOI-18-B-3:3
907024 -59	Dup-44
907024 -60	AOI-18-B-4:1.5
907024 -61	AOI-18-B-4:2.5
907024 -62	AOI-18-B-6:2
907024 -63	AOI-18-B-6:3

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-1:2	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1, F&BI 907024
Date Extracted:	07/19/19	Lab ID:	907024-10 1/6
Date Analyzed:	07/19/19	Data File:	071932.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.12

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-2:3	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1, F&BI 907024
Date Extracted:	07/19/19	Lab ID:	907024-14 1/6
Date Analyzed:	07/19/19	Data File:	071933.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.035

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-15:2	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1, F&BI 907024
Date Extracted:	07/19/19	Lab ID:	907024-16 1/6
Date Analyzed:	07/19/19	Data File:	071934.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.060

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-13:2	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1, F&BI 907024
Date Extracted:	07/19/19	Lab ID:	907024-26 1/6
Date Analyzed:	07/19/19	Data File:	071935.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-12:2	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1, F&BI 907024
Date Extracted:	07/19/19	Lab ID:	907024-28 1/6
Date Analyzed:	07/19/19	Data File:	071936.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-5:2.5	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1, F&BI 907024
Date Extracted:	07/19/19	Lab ID:	907024-32 1/6
Date Analyzed:	07/19/19	Data File:	071937.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.054

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-7:2	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1, F&BI 907024
Date Extracted:	07/19/19	Lab ID:	907024-40 1/6
Date Analyzed:	07/19/19	Data File:	071938.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.033

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-9:2	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1, F&BI 907024
Date Extracted:	07/19/19	Lab ID:	907024-41 1/6
Date Analyzed:	07/19/19	Data File:	071939.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.023

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-8:3	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1, F&BI 907024
Date Extracted:	07/19/19	Lab ID:	907024-43 1/6
Date Analyzed:	07/19/19	Data File:	071941.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.17

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-B-2:3	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1, F&BI 907024
Date Extracted:	07/31/19	Lab ID:	907024-55 1/6
Date Analyzed:	08/02/19	Data File:	080221.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.41

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907024
Date Extracted:	07/31/19	Lab ID:	09-1837 mb 1/6
Date Analyzed:	08/02/19	Data File:	080206.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	101	50	150
DBC	119	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907024
Date Extracted:	07/19/19	Lab ID:	09-1745 mb 1/6
Date Analyzed:	07/19/19	Data File:	071928.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	94	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/06/19

Date Received: 07/02/19

Project: Brookdale 74001.1, F&BI 907024

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907024-10 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.11	43 b	76 b	45-130	55 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	96	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/06/19

Date Received: 07/02/19

Project: Brookdale 74001.1, F&BI 907024

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907171-08 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	89	99	45-130	11

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	98	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

ME 07-02-19 7 405

SAMPLERS (signature)

Report To Thom Mann; Betsy Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Tacoma, WA 98027

Phone 425-395-0010 Email thom@epi-wa.com

PROJECT NAME

PO #

REMARKS

Brookdale

74001.1

INVOICE TO
Idiyo USA

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 10 day
Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-23-SW-1:1	01	7/1/19	0835	Soil	1								per BW 7/10/19 ME
A01-23-SW-8:0.5	03		0840										
A01-23-SW-2:2	03		0845										
A01-23-SW-7:0.5	04		0852										
A01-23-SW-3:0.5	05		0855										
A01-23-SW-6:0.5	06		0858										
A01-23-SW-4:0.3	07		0901										
A01-23-SW-5:0.5	08		0902										
A01-23-B-1:1	09		0919										
A01-23-B-1:2	10		0921										HOLD

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by: Betsy Wing

Betsy Wing

EP1

7/2/19

0614

Relinquished by: Michael Celi

Michael Celi

FR

7/2/19

1

Received by:

SAMPLE CHAIN OF CUSTODY

ME 07-02-19 2 of 7 Pgs

957024

Report To Thom Morris, Betsy Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 206-395-0010 Email thom@epi-wa.com
betsy@epi-wa.com

SAMPLERS (signature) <u>Betsy Wing</u>	
PROJECT NAME	PO #
<u>Brookdale</u>	<u>74001.1</u>
REMARKS	INVOICE TO
	<u>Deligo USA</u>

TURNAROUND TIME
<input type="checkbox"/> Standard Turnaround
<input checked="" type="checkbox"/> RUSH <u>10 day</u>
Rush charges authorized by:
SAMPLE DISPOSAL
<input type="checkbox"/> Dispose after 30 days
<input checked="" type="checkbox"/> Archive Samples
<input type="checkbox"/> Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 - Dieldrin	Method 8081 - Fuel Fuels		
A01-23-B-16:1	11	7/11/19	0926	Soil	1											
A01-23-B-2:2	12		0929													
A01-23-B-16:2	13		0930													HOLD
A01-23-B-2:3	14		0935													HOLD
A01-23-B-15:1	15		0938													HOLD
A01-23-B-15:2	16		0942													
A01-23-B-3:1	17		0947													
A01-23-B-3:2	18		0949													HOLD
Dup-41	19															
Dup-42	20															

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Betsy Wing</u>	<u>Betsy Wing</u>	<u>EP1</u>	<u>7/11/19</u>	<u>0615</u>
Received by: <u>Michael Ellis</u>	<u>Michael Ellis</u>	<u>EP1</u>	<u>7/11/19</u>	<u>1</u>
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

907024

SAMPLE CHAIN OF CUSTODY

ME 07-02-19

Page # 3 of 7

Report To Tom Morin; Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0910 Email thomson@epi-usa.combetsy@epi-usa.comSAMPLERS (signature) Betsy Wing
PROJECT NAME Brookdale

PO #

REMARKS

Brookdale

INVOICE TO

Idmjo USA

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 10 day
Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

TPH-HCID
TPH-Diesel
TPH-Gasoline
BTEX by 8021B
VOCs by 8260C
SVOCs by 8270D
PAHs 8270D SIM
Method 881-
Method 881-
Full suite

Notes

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 881- Method 881- Full suite	Notes
A01-23-B-14:1	21	7/1/19	0950	Soil	1								X	HOLD
A01-23-B-14:2	22		0954										X	HOLD
A01-23-B-4:1	23		1013										X	
A01-23-B-13:1	24		1014										X	
A01-23-B-4:2	25		1017											HOLD
A01-23-B-13:2	26		1018											HOLD
A01-23-B-12:1	27		1024											
A01-23-B-12:2	28		1028											HOLD
A01-23-B-11:1	29		1046										X	
A01-23-B-5:1,5	30		1049										X	

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Betsy WingBetsy WingEP17/2/190815

Received by:

MichaelMichaelEP17/2/191Friedman & Bryce, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029

Ph. (206) 285-8282

SAMPLE CHAIN OF CUSTODY

ME 07-02-19 4 of 7 nos

907074

Report To Thom Morin; Betsy Wing
Company EP1

Address 1188 NW Maple St SE, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email thom@ep1-wa.com
betsy@ep1-wa.com

SAMPLERS (signature) Betsy Wing
PROJECT NAME Brookdale

PO #

REMARKS Brookdale

INVOICE TO 74001.1
Idryto
USA

TURNAROUND TIME
☐ Standard Turnaround
☒ RUSH 10 day
Rush charges authorized by: _____

SAMPLE DISPOSAL
☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

ANALYSES REQUESTED

TPH-HCID
TPH-Diesel
TPH-Gasoline
BTEX by 8021B
VOCs by 8260C
SVOCs by 8270D
PAHs 8270D SIM
method 881
method 881
Full Site

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-23-B-11:2	31	7/11/19	1050	Soil	1								HOLD
A01-23-B-5:2.5	32		1051										HOLD
Dup-43	33												
A01-23-B-10:1	34		1142										
A01-23-B-6:0.5	35		1145										
A01-23-B-10:2	36		1148										HOLD
A01-23-B-6:1.5	37		1149										HOLD
A01-23-B-9:1	38		1158										
A01-23-B-7:1	39		1201										
A01-23-B-7:2	40		1203										HOLD

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Received by: Betsy Wing

Betsy Wing

EP1

7/2/19

6:15

Received by: Michael Leung

Michael Leung

EP1

7/2/19

4

Received by:

SAMPLE CHAIN OF CUSTODY

ME 07-02-19 5 of 7 PPS

Report To: Tom Morn, Betsy Wing
 Company: EP1

Address: 180 NW Maple St, Ste 310
 City, State, ZIP: Bethesda, WA 98027
 Phone: 206-395-6610 Email: tom.morn@ep1-wa.com

SAMPLES (signature)
Betsy Wing
 PROJECT NAME: Brookdale

PO # 74001.1

REMARKS

INVOICE TO Idmjo USA

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 10 day
 Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

ANALYSES REQUESTED

TPH-HCID
 TPH-Diesel
 TPH-Gasoline
 BTEX by 8021B
 VOCs by 8260C
 SVOCs by 8270D
 PAHs 8270D SIM
 Method 8081
 Method 8081
 Full State

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-23-B-9:2	41	7/1/19	1204	Soil	1								HOLD
A01-23-B-8:2	42		1207										
A01-23-B-8:3	43		1211										HOLD
A01-18-SW-5:1	44		1300										
A01-18-SW-1:0.5	45		1303										
A01-18-SW-6:1	46		1304										
A01-18-SW-2:1	47		1305										
A01-18-SW-7:0.5	48		1308										
A01-18-SW-3:0.5	49		1309										
A01-18-SW-4:1	50	✓	1310	✓	✓								

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 265-8282

Received by: Betsy Wing

Received by: Michael E. Hall

EP1

7/2/19

06:00

Relinquished by:

Received by:

SAMPLE CHAIN OF CUSTODY

ME 07-02-19 6 of 7 pgs

907024

Send Report To Thom Merrin; Betsy Wing

Company Environmental Partners, Inc

Address 1180 NW Maple St Suite 310

City, State, ZIP Issaquah, WA 98027

Phone # (425) 395-0010 Fax # (425) 395-0011

email: thom@epi-usa.com

SAMPLE ID: <u>907024</u>		PO#
PROJECT NAME/NO. <u>Brookdale</u>		<u>74661.1</u>
REMARKS <u>Inocula to: Idaho USA</u>		

TURNAROUND TIME <input type="checkbox"/> Standard (2 Weeks) <input checked="" type="checkbox"/> RUSH <u>10 day</u>	
Rush charges authorized by _____	
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Return samples <input type="checkbox"/> Will call with instructions	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED						Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	
AD1-18-B-1:1.5	51	7/1/19	1325	Soil	1						X	Method 8061 Full Suite
AD1-18-B-1:2.5	52		1329								X	
AD1-18-B-5:1	53		1336								X	
AD1-18-B-2:2	54		1337								X	
AD1-18-B-2:3	55		1341								X	
AD1-18-B-3:2	56		1345								X	
AD1-18-B-5:2	57		1346								X	
AD1-18-B-3:3	58		1349								X	
Dup-44	59		—								X	
AD1-18-B-4:1.5	60		1354								X	

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
<u>Betsy Wing</u>		<u>Betsy Wing</u>		<u>EP1</u>		<u>7/2/19</u>	<u>0116</u>
Relinquished by:		Relinquished by:		Relinquished by:		<u>7/2/19</u>	<u>1</u>
Received by:		Received by:		Received by:			

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 17, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 907024

Dear Mr Morin:

Included are the results from the testing of material submitted on July 2, 2019 from the Brookdale 74001.1, F&BI 907024 project. There are 54 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0717R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 2, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 907024 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907024 -01	AOI-23-SW-1:1
907024 -02	AOI-23-SW-8:0.5
907024 -03	AOI-23-SW-2:2
907024 -04	AOI-23-SW-7:0.5
907024 -05	AOI-23-SW-3:0.5
907024 -06	AOI-23-SW-6:0.5
907024 -07	AOI-23-SW-4:0.3
907024 -08	AOI-23-SW-5:0.5
907024 -09	AOI-23-B-1:1
907024 -10	AOI-23-B-1:2
907024 -11	AOI-23-B-16:1
907024 -12	AOI-23-B-2:2
907024 -13	AOI-23-B-16:2
907024 -14	AOI-23-B-2:3
907024 -15	AOI-23-B-15:1
907024 -16	AOI-23-B-15:2
907024 -17	AOI-23-B-3:1
907024 -18	AOI-23-B-3:2
907024 -19	Dup-41
907024 -20	Dup-42
907024 -21	AOI-23-B-14:1
907024 -22	AOI-23-B-14:2
907024 -23	AOI-23-B-4:1
907024 -24	AOI-23-B-13:1
907024 -25	AOI-23-B-4:2
907024 -26	AOI-23-B-13:2
907024 -27	AOI-23-B-12:1
907024 -28	AOI-23-B-12:2
907024 -29	AOI-23-B-11:1
907024 -30	AOI-23-B-5:1.5
907024 -31	AOI-23-B-11:2
907024 -32	AOI-23-B-5:2.5
907024 -33	Dup-43
907024 -34	AOI-23-B-10:1
907024 -35	AOI-23-B-6:0.5
907024 -36	AOI-23-B-10:2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907024 -37	AOI-23-B-6:1.5
907024 -38	AOI-23-B-9:1
907024 -39	AOI-23-B-7:1
907024 -40	AOI-23-B-7:2
907024 -41	AOI-23-B-9:2
907024 -42	AOI-23-B-8:2
907024 -43	AOI-23-B-8:3
907024 -44	AOI-18-SW-5:1
907024 -45	AOI-18-SW-1:0.5
907024 -46	AOI-18-SW-6:1
907024 -47	AOI-18-SW-2:1
907024 -48	AOI-18-SW-7:0.5
907024 -49	AOI-18-SW-3:0.5
907024 -50	AOI-18-SW-4:1
907024 -51	AOI-18-B-1:1.5
907024 -52	AOI-18-B-1:2.5
907024 -53	AOI-18-B-5:1
907024 -54	AOI-18-B-2:2
907024 -55	AOI-18-B-2:3
907024 -56	AOI-18-B-3:2
907024 -57	AOI-18-B-5:2
907024 -58	AOI-18-B-3:3
907024 -59	Dup-44
907024 -60	AOI-18-B-4:1.5
907024 -61	AOI-18-B-4:2.5
907024 -62	AOI-18-B-6:2
907024 -63	AOI-18-B-6:3

The 8081B calibration standard failed the acceptance criteria for several pesticides. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-1:1	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-01 1/6
Date Analyzed:	07/08/19	Data File:	070846.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-8:0.5	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-02 1/6
Date Analyzed:	07/08/19	Data File:	070847.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.21

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-2:2	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-03 1/6
Date Analyzed:	07/08/19	Data File:	070848.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-7:0.5	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-04 1/6
Date Analyzed:	07/08/19	Data File:	070849.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.022

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-3:0.5	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-05 1/6
Date Analyzed:	07/09/19	Data File:	070850.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-6:0.5	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-06 1/6
Date Analyzed:	07/09/19	Data File:	070851.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.037

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-4:0.3	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-07 1/6
Date Analyzed:	07/09/19	Data File:	070852.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-5:0.5	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-08 1/6
Date Analyzed:	07/09/19	Data File:	070853.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-1:1	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-09 1/6
Date Analyzed:	07/09/19	Data File:	070858.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.098

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-16:1	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-11 1/6
Date Analyzed:	07/09/19	Data File:	070859.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.026

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-2:2	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-12 1/6
Date Analyzed:	07/09/19	Data File:	070860.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.032

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-15:1	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-15 1/6
Date Analyzed:	07/09/19	Data File:	070861.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.28

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-3:1	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-17 1/6
Date Analyzed:	07/09/19	Data File:	070862.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.081

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-41	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-19 1/6
Date Analyzed:	07/09/19	Data File:	070863.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-42	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-20 1/6
Date Analyzed:	07/09/19	Data File:	070906.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.081

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-14:1	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-21 1/6
Date Analyzed:	07/09/19	Data File:	070907.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	108	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.033

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-4:1	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-23 1/6
Date Analyzed:	07/09/19	Data File:	070908.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	109	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-13:1	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-24 1/6
Date Analyzed:	07/09/19	Data File:	070909.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	89	50	150
DBC	117	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.37

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-12:1	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-27 1/6
Date Analyzed:	07/08/19	Data File:	070836.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.014
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.074
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-11:1	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-29 1/6
Date Analyzed:	07/09/19	Data File:	070910.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.015

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-5:1.5	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-30 1/6
Date Analyzed:	07/09/19	Data File:	070911.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	110	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.24

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-43	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/03/19	Lab ID:	907024-33 1/60
Date Analyzed:	07/12/19	Data File:	071236.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86 d	50	150
DBC	89 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.59

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-10:1	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-34 1/6
Date Analyzed:	07/09/19	Data File:	070913.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	91	50	150
DBC	114	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.014

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-6:0.5	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-35 1/6
Date Analyzed:	07/09/19	Data File:	070914.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	105	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-9:1	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-38 1/6
Date Analyzed:	07/09/19	Data File:	070915.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	112	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.067

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-7:1	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-39 1/6
Date Analyzed:	07/09/19	Data File:	070916.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	94	50	150
DBC	121	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-8:2	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-42 1/6
Date Analyzed:	07/08/19	Data File:	070837.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.031
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.12
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-SW-5:1	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/03/19	Lab ID:	907024-44 1/60
Date Analyzed:	07/12/19	Data File:	071237.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81 d	50	150
DBC	87 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.95

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-SW-1:0.5	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-45 1/6
Date Analyzed:	07/08/19	Data File:	070838.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.059
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-SW-6:1	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-46 1/6
Date Analyzed:	07/09/19	Data File:	070918.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	109	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.083

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-SW-2:1	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-47 1/6
Date Analyzed:	07/09/19	Data File:	070919.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	105	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-SW-7:0.5	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/03/19	Lab ID:	907024-48 1/6
Date Analyzed:	07/05/19	Data File:	070528.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	106	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-SW-3:0.5	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/03/19	Lab ID:	907024-49 1/6
Date Analyzed:	07/05/19	Data File:	070529.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	105	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-SW-4:1	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/03/19	Lab ID:	907024-50 1/6
Date Analyzed:	07/05/19	Data File:	070530.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.26

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-B-1:1.5	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/03/19	Lab ID:	907024-51 1/6
Date Analyzed:	07/05/19	Data File:	070531.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	112	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-B-5:1	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/03/19	Lab ID:	907024-53 1/6
Date Analyzed:	07/05/19	Data File:	070532.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-B-2:2	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/03/19	Lab ID:	907024-54 1/6
Date Analyzed:	07/05/19	Data File:	070533.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.40

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-B-3:2	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/03/19	Lab ID:	907024-56 1/6
Date Analyzed:	07/05/19	Data File:	070534.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-44	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/03/19	Lab ID:	907024-59 1/6
Date Analyzed:	07/05/19	Data File:	070535.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-B-4:1.5	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	907024-60 1/6
Date Analyzed:	07/08/19	Data File:	070839.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.13
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.014
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-B-6:2	Client:	Environmental Partners
Date Received:	07/02/19	Project:	Brookdale 74001.1
Date Extracted:	07/03/19	Lab ID:	907024-62 1/6
Date Analyzed:	07/05/19	Data File:	070536.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1
Date Extracted:	07/03/19	Lab ID:	09-1604 mb 1/6
Date Analyzed:	07/06/19	Data File:	070546.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	109	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1
Date Extracted:	07/03/19	Lab ID:	09-1603 mb 1/6
Date Analyzed:	07/09/19	Data File:	070854.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1
Date Extracted:	07/02/19	Lab ID:	09-1569 mb 1/6
Date Analyzed:	07/03/19	Data File:	070326.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1
Date Extracted:	07/03/19	Lab ID:	09-1604 mb 1/6
Date Analyzed:	07/08/19	Data File:	070832.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/17/19

Date Received: 07/02/19

Project: Brookdale 74001.1, F&BI 907024

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907001-34 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	117	109	45-130	7

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	73	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/17/19

Date Received: 07/02/19

Project: Brookdale 74001.1, F&BI 907024

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907024-09 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.087	84 b	100 b	45-130	17 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	100	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/17/19

Date Received: 07/02/19

Project: Brookdale 74001.1, F&BI 907024

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907024-48 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	92	101	45-130	9

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	104	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/17/19

Date Received: 07/02/19

Project: Brookdale 74001.1, F&BI 907024

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR ORGANOCHLORINE PESTICIDES BY EPA METHOD 8081B

Laboratory Code: 907024-48 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	<0.01	85	90	45-111	6
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	<0.01	91	98	50-117	7
beta-BHC	mg/kg (ppm)	0.1	<0.01	91	97	49-109	6
delta-BHC	mg/kg (ppm)	0.1	0.017	82	92	39-114	11
Heptachlor	mg/kg (ppm)	0.1	<0.01	99	107	40-131	8
Aldrin	mg/kg (ppm)	0.1	<0.01	91	97	44-121	6
Heptachlor Epoxide	mg/kg (ppm)	0.1	<0.01	94	101	46-122	7
trans-Chlordane	mg/kg (ppm)	0.1	<0.01	93	100	41-129	7
cis-Chlordane	mg/kg (ppm)	0.1	<0.01	96	103	44-120	7
4,4'-DDE	mg/kg (ppm)	0.1	<0.01	87	93	50-150	7
Endosulfan I	mg/kg (ppm)	0.1	<0.01	90	95	45-124	5
Dieldrin	mg/kg (ppm)	0.1	<0.01	92	101	45-130	9
Endrin	mg/kg (ppm)	0.1	<0.01	108	117	50-140	8
4,4'-DDD	mg/kg (ppm)	0.1	<0.01	118	129	26-155	9
Endosulfan II	mg/kg (ppm)	0.1	<0.01	89	96	40-135	8
4,4'-DDT	mg/kg (ppm)	0.1	<0.01	73	73	50-150	0
Endrin Aldehyde	mg/kg (ppm)	0.1	<0.01	90	94	35-139	4
Methoxychlor	mg/kg (ppm)	0.1	<0.01	87	90	28-162	3
Endosulfan Sulfate	mg/kg (ppm)	0.1	<0.01	95	102	40-141	7
Endrin Ketone	mg/kg (ppm)	0.1	<0.01	97	104	41-147	7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/17/19

Date Received: 07/02/19

Project: Brookdale 74001.1, F&BI 907024

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907024-27 1/6 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Toxaphene	mg/kg (ppm)	4	<1	94	91	50-150	3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/17/19

Date Received: 07/02/19

Project: Brookdale 74001.1, F&BI 907024

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
alpha-BHC	mg/kg (ppm)	0.1	92	56-113
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	98	58-120
beta-BHC	mg/kg (ppm)	0.1	101	70-130
delta-BHC	mg/kg (ppm)	0.1	102	70-130
Heptachlor	mg/kg (ppm)	0.1	108	56-124
Aldrin	mg/kg (ppm)	0.1	100	70-130
Heptachlor Epoxide	mg/kg (ppm)	0.1	103	70-130
trans-Chlordane	mg/kg (ppm)	0.1	102	60-123
cis-Chlordane	mg/kg (ppm)	0.1	105	70-130
4,4'-DDE	mg/kg (ppm)	0.1	96	70-130
Endosulfan I	mg/kg (ppm)	0.1	100	62-124
Dieldrin	mg/kg (ppm)	0.1	104	70-130
Endrin	mg/kg (ppm)	0.1	116	56-147
4,4'-DDD	mg/kg (ppm)	0.1	133	54-137
Endosulfan II	mg/kg (ppm)	0.1	100	42-140
4,4'-DDT	mg/kg (ppm)	0.1	76	25-169
Endrin Aldehyde	mg/kg (ppm)	0.1	92	21-135
Methoxychlor	mg/kg (ppm)	0.1	88	54-154
Endosulfan Sulfate	mg/kg (ppm)	0.1	106	39-148
Endrin Ketone	mg/kg (ppm)	0.1	109	46-134
Toxaphene	mg/kg (ppm)	4	100	56-145

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

ME 07-02-19

Page # 1 of 7

SAMPLERS (signature)

Report To Tom Mann; Betsy Wing

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Tacoma, WA 98607

Phone 425-395-0010 Email thommm@epi-wa.com

betsey@epi-wa.com

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO Tdnjrd USA

TURNAROUND TIME

☐ Standard Turnaround

☒ RUSH 10 day

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081-1999	Method 8081-2002	Method 8081-2002 Full Site	Notes
-----------	--------	--------------	--------------	-------------	-----------	----------	------------	--------------	---------------	---------------	----------------	----------------	------------------	------------------	----------------------------	-------

AD1-23-SW-1:1	01	7/1/19	0835	Soil	1								X			
AD1-23-SW-8:0.5	02		0840										X			
AD1-23-SW-2:2	03		0845										X			
AD1-23-SW-7:0.5	04		0852										X			
AD1-23-SW-3:0.5	05		0855										X			
AD1-23-SW-6:0.5	06		0858										X			
AD1-23-SW-4:0.3	07		0901										X			
AD1-23-SW-5:0.5	08		0902										X			
AD1-23-B-1:1	09		0919										X			
AD1-23-B-1:2	10		0921													HOLD

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bryna, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: Betsy Wing

Received by: Michael L. Celi

Relinquished by:

Received by:

Samples received at 3:00

SAMPLE CHAIN OF CUSTODY

ME 07-02-19 2 of 7 AOS

Report To Thom Marin, Betsy Wing
 Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email thom@epi-wa.com

betsy@epi-wa.com

SAMPLES (signature) <u>Betsy Wing</u>	
PROJECT NAME	PO #
<u>Brookdale</u>	<u>74001.1</u>
REMARKS	INVOICE TO
	<u>Tenyo USA</u>

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>10 day</u> Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other
--	--

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 - Dieldrin	Method 8081 - Fuel Fuels	Notes
A01-23-B-16:1	11	7/11/19	0926	Soil	1								X		
A01-23-B-2:2	12		0929										X		HOLD
A01-23-B-16:2	13		0930												HOLD
A01-23-B-2:3	14		0935												HOLD
A01-23-B-15:1	15		0938										X		HOLD
A01-23-B-15:2	16		0942												
A01-23-B-3:1	17		0947										X		
A01-23-B-3:2	18		0949												HOLD
Dup-41	19												X		
Dup-42	20												X		

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruja, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by:	<u>Betsy Wing</u>	Received by:	<u>Michael E. Reid</u>
Relinquished by:		Received by:	

907024

SAMPLE CHAIN OF CUSTODY

ME 07-02-19 3 of 7 #05

Report To Thom Morin, Betsy Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah WA 98027

Phone 425-395-0510 Email thom.morin@epi-usa.com
betsy.wing@epi-usa.com

SAMPLES (signature)
Betsy Wing
PROJECT NAME

PO #

REMARKS
Brookdale

INVOICE TO
Idnijo
USA

TURNAROUND TIME
☐ Standard Turnaround
☒ RUSH 10 day
Rush charges authorized by: _____

SAMPLE DISPOSAL
☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-23-B-14:1	21	7/1/19	0950	Soil	1							X	HOLD
A01-23-B-14:2	22		0954									X	HOLD
A01-23-B-4:1	23		1013									X	
A01-23-B-13:1	24		1014									X	
A01-23-B-4:2	25		1017										HOLD
A01-23-B-13:2	26		1018										HOLD
A01-23-B-12:1	27		1024									X	
A01-23-B-12:2	28		1028										HOLD
A01-23-B-11:1	29		1046									X	
A01-23-B-5:1,5	30		1049									X	

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: Betsy Wing

Betsy Wing

EP1

7/2/19

0618

Received by: Michael Enclis

Michael Enclis

EP1

7/2/19

1

Received by:

SAMPLE CHAIN OF CUSTODY

ME 03-02-19 4 of 7 nos

907024

Report To Thom Morin; Betsy Wing

Company EP1

Address 1180 NW Maple St SE, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email thom@ep1-wa.com

Betsy Wing

SAMPLERS (signature) Betsy Wing
PROJECT NAME

PO #

REMARKS

Brookdale

INVOICE TO

74001.1

TURNAROUND TIME
Page # 4 of 7 nos
Standard Turnaround 10 days
Rush charges authorized by: EP1
SAMPLE DISPOSAL
☐ Standard Turnaround
☒ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
AP1-23-B-11:2	31	7/11/19	1050	Soil	1								HOLD
AP1-23-B-5:2.5	32		1051										HOLD
Dug-43	33											X	
AP1-23-B-10:1	34		1142									X	
AP1-23-B-6:0.5	35		1145									X	
AP1-23-B-10:2	36		1148										HOLD
AP1-23-B-6:1.5	37		1149										HOLD
AP1-23-B-9:1	38		1158									X	
AP1-23-B-7:1	39		1201									X	
AP1-23-B-7:2	40		1203										HOLD

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Requisitioned by: Betsy Wing

Received by: Betsy Wing

Relinquished by:

Betsy Wing

Michael E. L. V.

EP1

EP1

7/12/19

7/12/19

6:15

4

Received by:

SAMPLE CHAIN OF CUSTODY

ME 07-02-19 5 of 7 pgs

907074

Report To Tom Monn, Betsy Wing

Company EP1

Address 180 NW Maple St, Ste 310

City, State, ZIP Brockdale WA 98027

Phone 425-395-6612 Email thommon@epi-wa.com

betsy@epi-wa.com

SAMPLE CHAIN OF CUSTODY
Betsy Wing

PROJECT NAME

Brockdale

PO #

74001.1

REMARKS

INVOICE TO

Idrijd
USA

TURNAROUND TIME

Standard Turnaround

RUSH 10 day

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Archive Samples

Other

ANALYSES REQUESTED

TPH-HCID
TPH-Diesel
TPH-Gasoline
BTEX by 8021B
VOCs by 8260C
SVOCs by 8270D
PAHs 8270D SIM
Method 8081
Fieldrin
Method 8081
Full Suite

Notes

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081	Fieldrin	Method 8081	Full Suite
A01-23-B-9:2	41	7/1/19	1204	Soil	1											
A01-23-B-8:2	42		1207													
A01-23-B-8:3	43		1211													
A01-18-SW-5:1	44		1300													
A01-18-SW-1:0.5	45		1303													
A01-18-SW-6:1	46		1304													
A01-18-SW-2:1	47		1305													
A01-18-SW-7:0.5	48		1308													
A01-18-SW-3:0.5	49		1309													
A01-18-SW-4:1	50		1310													

HOLD

HOLD

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Received by: Betsy Wing

Betsy Wing

EP1

7/2/19

06:00

Reinquired by:

Michael E. Ehl

EP1

7/2/15

1

Received by:

SAMPLE CHAIN OF CUSTODY

ME 07-02-19 Page # 6 of 7 Abs

907034

Send Report To Thom Morin, Betsy Wing

Company Environmental Partners, Inc

Address 1180 NW Maple St Suite 310

City, State, ZIP Issaquah, WA 98027

Phone # (425) 395-0010 Fax # (425) 395-0011

email: thom@epi-usa.com

SAMPLER'S SIGNATURE <u>[Signature]</u>		PO#
PROJECT NAME/NO.		
REMARKS	<u>Brookdale 74061.1</u>	
<u>Invoice to: Idaho USA</u>		

TURNAROUND TIME	Standard (2 Weeks)	<input type="checkbox"/>
RUSH	<u>10 day</u>	<input checked="" type="checkbox"/>
Rush charges authorized by		
SAMPLE DISPOSAL		
Dispose after 30 days	<input type="checkbox"/>	
Return samples	<input type="checkbox"/>	
Will call with instructions	<input type="checkbox"/>	
<u>Archive</u>		

ANALYSES REQUESTED																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
						HFS	Method 8081 Dioxin	Method 8081 Full Suite																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
A01-18-B-1:1.5	57	7/1/19	1325	Soil	1						X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>[Signature]</u>		Betsy Wing		EP1		7/2/19		0136	
Received by: <u>[Signature]</u>		Michael E. Hall		FMS		7/2/19		1	
Relinquished by:									
Received by:									

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

M 07-07-19

7705

Send Report To Thom Marin, Betsy Hine

Address 1180 NW Maple St Suite 310

Phone # (425) 395-0010 Fax # (425) 395-0011

email: Thommas2000-1029.com

PO#

74802.1

REMARKS	Invoice	Idris	USA
Invoice			
to:			

TURNAROUND TIME
☐ Standard (2 Weeks)
☒ **RUSH** Two Week
 Rush charges authorized by _____

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Return samples Archives
☐ Will call with instructions

☐ Dispose after 30 days
☐ Return samples *Archi*
☐ Will call with instructions

[illegible]

3012 16th Avenue West

Ph. (206) 285-8282

Fax (206) 283-5044

ENDASERVICOR INC

TIME

Received by: _____

EP1

6615

Relinquished by:

Received by:

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 2, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 907061

Dear Mr Morin:

Included are the additional results from the testing of material submitted on July 3, 2019 from the Brookdale 74001.1, F&BI 907061 project. There are 8 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0802R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 3, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 907061 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907061 -01	AOI-18-B-7:1
907061 -02	AOI-18-B-13:2
907061 -03	AOI-18-B-7:2
907061 -04	AOI-18-B-13:3
907061 -05	AOI-18-B-8:2.5
907061 -06	AOI-18-B-8:3.5
907061 -07	AOI-18-B-12:2
907061 -08	AOI-18-B-9:1.5
907061 -09	AOI-18-B-12:3
907061 -10	AOI-18-B-9:2.5
907061 -11	AOI-18-B-11:1
907061 -12	AOI-18-B-11:2
907061 -13	AOI-18-B-10:1
907061 -14	AOI-18-B-10:2
907061 -15	DUP-45
907061 -16	AOI-19-B-1:1
907061 -17	AOI-19-B-1:2
907061 -18	AOI-19-B-2:1.5
907061 -19	AOI-19-SW-1:1
907061 -20	AOI-19-B-2:2.5
907061 -21	AOI-19-B-3:1.5
907061 -22	AOI-19-B-3:2.5
907061 -23	AOI-19-SW-2:0.5
907061 -24	AOI-19-SW-3:0.5
907061 -25	AOI-19-B-4:1.5
907061 -26	AOI-19-B-4:2.5
907061 -27	AOI-19-SW-4:0.5
907061 -28	AOI-24-B-1:1.5
907061 -29	AOI-24-B-1:2.5
907061 -30	AOI-24-SW-1:0.5
907061 -31	AOI-24-SW-2:0.5
907061 -32	AOI-24-B-2:1
907061 -33	AOI-24-B-2:2
907061 -34	AOI-24-SW-3:1
907061 -35	AOI-24-SW-4:1
907061 -36	AOI-24-B-3:2.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907061 -37	AOI-24-SW-5:1
907061 -38	AOI-24-B-3:3.5
907061 -39	AOI-24-SW-6:0.5
907061 -40	AOI-24-B-4:2
907061 -41	AOI-24-SW-7:1
907061 -42	AOI-24-B-4:3
907061 -43	AOI-24-SW-8:0.5
907061 -44	AOI-24-B-6:2
907061 -45	AOI-24-B-5:1.5
907061 -46	AOI-24-B-5:2.5
907061 -47	AOI-24-B-6:3
907061 -48	DUP-46
907061 -49	AOI-25-B-1:2
907061 -50	AOI-25-B-1:3
907061 -51	AOI-25-SW-6:1
907061 -52	DUP-47
907061 -53	AOI-25-B-2:2
907061 -54	AOI-25-SW-7:1
907061 -55	AOI-25-B-14:1
907061 -56	AOI-25-B-2:3
907061 -57	AOI-25-B-14:2
907061 -58	AOI-25-B-13:1
907061 -59	AOI-25-B-3:2
907061 -60	AOI-25-B-13:2
907061 -61	AOI-25-B-12:1
907061 -62	AOI-25-B-3:3
907061 -63	AOI-25-B-12:2
907061 -64	AOI-25-SW-1:1
907061 -65	AOI-25-B-4:2
907061 -66	AOI-25-SW-2:1
907061 -67	AOI-25-B-4:3
907061 -68	AOI-25-SW-3:1
907061 -69	AOI-25-SW-4:0.5
907061 -70	AOI-25-SW-5:0.5
907061 -71	DUP-48
907061 -72	DUP-49
907061 -73	AOI-25-B-11:2
907061 -74	AOI-25-B-11:3
907061 -75	DUP-50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907061 -76	AOI-25-B-5:1.5
907061 -77	AOI-25-B-10:2
907061 -78	AOI-25-B-5:2.5
907061 -79	AOI-25-B-10:3

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-B-11:2	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/29/19	Lab ID:	907061-12 1/6
Date Analyzed:	07/30/19	Data File:	073034.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.010

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-B-3:2.5	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/29/19	Lab ID:	907061-22 1/6
Date Analyzed:	07/30/19	Data File:	073035.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/29/19	Lab ID:	09-1803 mb 1/6
Date Analyzed:	07/30/19	Data File:	073008.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	93	50	150
DBC	110	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/19

Date Received: 07/03/19

Project: Brookdale 74001.1, F&BI 907061

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907493-04 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	75	68	45-130	10

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

ME 07-03-17 1 of 8 AOS

907061

Report To Thom Mann, Betsy W

Company EPI

Address 1180 NW Maple St, Suite 300

City, State, ZIP Issaquah, WA

Phone (425) 845-6100 Email thommann@epi.com
betsyw@epi.com

SAMPLERS (signature) <u>Juliea Bressan</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74601.1</u>
REMARKS	INVOICE TO <u>ICWJO USA</u>

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH <u>10-day FAT</u> Rush charges authorized by: _____	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____
---	--

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-18-B-7:1	01	7/2/19	0749	Soil	1							<input checked="" type="checkbox"/> (method 8461) <input checked="" type="checkbox"/> (field in) <input checked="" type="checkbox"/> (method 8461) <input checked="" type="checkbox"/> (Full SW k)	1
A01-18-B-13:2	02		0752									<input checked="" type="checkbox"/>	HOLD
A01-18-B-7:2	03		0753										HOLD
A01-18-B-13:3	04		0758										HOLD
A01-18-B-8:2.5	05		0803									<input checked="" type="checkbox"/>	HOLD
A01-18-B-8:3.5	06		0807										HOLD
A01-18-B-12:2	07		0808									<input checked="" type="checkbox"/>	
A01-18-B-9:1.5	08		0813									<input checked="" type="checkbox"/>	
A01-18-B-12:3	09		0814										HOLD
A01-18-B-9:2.5	10		0819										HOLD

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Received by: <u>Betsy Mann</u>	Received by: <u>Betsy Mann</u>	Received by: <u>Betsy Mann</u>
Relinquished by: <u>Juliea Bressan</u>	Relinquished by: <u>Juliea Bressan</u>	Relinquished by: <u>Juliea Bressan</u>
Received by: _____	Received by: _____	Received by: _____

Samples received at 7/3/19 4:00 PM

at 7/3/19 4:00 PM

at 7/3/19 4:00 PM

907061

SAMPLE CHAIN OF CUSTODY

ME 07-03-19 2

8 hrs

Report To Thom Thoma, Betsy Wing

Company EP1

Address 1180 NW Maple St, Suite 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-2810 Email thom@epi-va.com

SAMPLERS (signature) <u>Robert Reenan</u>	
PROJECT NAME <u>Brockdale</u>	PO # <u>74001.1</u>
REMARKS	INVOICE TO <u>Ichijo USA</u>

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH 10-day <u>741</u> Rush charges authorized by:	
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other	

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-18-B-11:1	11	7/2/19	0822	Soil	1							<input checked="" type="checkbox"/> Method 8081-1-1508 Full Site	<input checked="" type="checkbox"/> -pr 8/20/19
A01-18-B-11:2	12		0828									<input checked="" type="checkbox"/>	HOLD
A01-18-B-10:1	13		0831									<input checked="" type="checkbox"/>	
A01-18-B-10:2	14		0833									<input checked="" type="checkbox"/>	HOLD
DUP-45	15		-									<input checked="" type="checkbox"/>	
A01-19-B-1:1	16		0906									<input checked="" type="checkbox"/>	
A01-19-B-1:2	17		0912									<input checked="" type="checkbox"/>	HOLD
A01-19-B-2:1.5	18		0914									<input checked="" type="checkbox"/>	
A01-19-SW-1:1	19		0915									<input checked="" type="checkbox"/>	
A01-19-B-2:2.5	20		0920										HOLD

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: <u>Betsy Wing</u>	Received by: <u>M. Caldwell</u>	Relinquished by:	Received by:
<u>Betsy Wing</u>	<u>M. Caldwell</u>		
		Samples received at	<u>20C</u>

SAMPLE CHAIN OF CUSTODY

ME 07-03-19 3 of 8 pgs

907061

Report To Thom Morin, Betsy Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-1018 Email betsyw@epi.wa.com

SAMPLERS (signature) <u>Rebecca Beecher</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS	INVOICE TO <u>Lehigh USA</u>

TURNAROUND TIME Page # <u>3</u> of <u>8</u>	
<input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH <u>10 day</u> <u>141</u> Rush charges authorized by:	
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other	

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-19-B-3:1.5	R1	7/2/19	0930	Soil	1							Method 8081- Dieldrin Method 8081- Full Suite	<input checked="" type="checkbox"/> -pe 7/25/19 ac
A01-19-B-3:2.5	R2		0936										HELD
A01-19-SW-2:0.5	R3		0937										
A01-19-SW-3:0.5	R4		0939										
A01-19-B-4:1.5	R5		0940										
A01-19-B-4:2.5	R6		0944										HELD
A01-19-SW-4:0.5	R7		0945										
A01-24-B-1:1.5	R8		1015										
A01-24-B-1:2.5	R9		1017										HELD
A01-24-SW-1:0.5	R0		1020										

Friedman & Brya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>Betsy Wing</u>		<u>Betsy Wing</u>		<u>EP1</u>		<u>7/3/19</u>		<u>6:15</u>	
Received by: <u>Michael Celli</u>		<u>Michael Celli</u>		<u>FRB</u>		<u>7/3/19</u>			
Relinquished by:									
Received by:				Samples received at		<u>2</u>		<u>00</u>	

707061

SAMPLE CHAIN OF CUSTODY

ME 07-03-19

4

8 PMS

Report To Thom Mann, Betsy Wing

Company EPI

Address 1180 NW Maple St, Suite 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email thom@epi-wa.com

SAMPLERS (signature) Roberta Brown

PROJECT NAME Brookdale

PO # 74001-1

REMARKS

INVOICE TO Lujo USA

Page #

of

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 10 day TAT

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

TPH-HCID
TPH-Diesel
TPH-Gasoline
BTEX by 8021B
VOCs by 8260C
SVOCs by 8270D
PAHs 8270D SIM
Method 8081-Diel drin
Method 8081-Full Suite

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081-Diel drin	Method 8081-Full Suite	Notes
A01-24-SW-2:0.5	31	7/2/19	1024	Soil	1										
A01-24-B-2:1	32		1025		1										
A01-24-B-2:2	33		1027		1										HOLD
A01-24-SW-3:1	34		1030		1										
A01-24-SW-4:1	35		1034		1										
A01-24-B-3:2.5	36		1037		1										
A01-24-SW-5:1	37		1038		1										
A01-24-B-3:3.5	38		1041		1										
A01-24-SW-6:0.5	39		1042		1										HOLD
A01-24-B-4:2	40		1045		1										

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Betsy Wing

EPI

7/3/19

615

Received by:

Michael Clark

T-13 Inc

7/3/19

1

Relinquished by:

Samples received at

2

OC

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

907061

SAMPLE CHAIN OF CUSTODY

ME 07-03-19

Page # 5 of 8

Report To Thom Main; Betsy Wing

Company EPI

Address 118D NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 345-2400 Email betsy@epi-wa.com

SAMPLERS (signature) <u>Libera Boerner</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS	INVOICE TO <u>Idaho USA</u>

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>10 day TAT</u> Rush charges authorized by: _____	
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081- Diesel	Method 8081- Fuel	Method 8081- Full Suite	
A01-24-SW-7:1	41	7/2/19	1046	Soil	1								X			HOLD
A01-24-B-4:3	42		1049										X			
A01-24-SW-8:0.5	43		1052										X			
A01-24-B-6:2	44		1058										X			
A01-24-B-5:1.5	45		1101										X			
A01-24-B-5:2.5	46		1103													HOLD
A01-24-B-6:3	47		1104													HOLD
DWP-46	48		—										X			
A01-25-B-1:2	49		1158										X			
A01-25-B-1:3	50		1204													HOLD

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <u>Betsy Wing</u>		<u>Betsy Wing</u>		<u>EPI</u>		<u>7/3/19</u>	<u>0615</u>
Received by: <u>Michael Decker</u>		<u>Michael Decker</u>		<u>Idaho</u>		<u>7/3/19</u>	<u>1</u>
Relinquished by:							
Received by:				Samples received at <u>2</u> o'clock			

907061

SAMPLE CHAIN OF CUSTODY

ME 07-08-19

Page # 10 of 8 Abs

Report To Thom Main, Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 345-0810 Email thommaine@epi-wa.comPerkins Operations

SAMPLERS (signature) <u>River Becerra</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS	INVOICE TO <u>Idrup USA</u>

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround	<input type="checkbox"/> RUSH 10 day <u>14T</u>
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	<input checked="" type="checkbox"/> Archive Samples
<input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081-1	Method 8081-2	Method 8081-3	
A01-25-SW-6:1	51	7/2/19	1205	Soil	1								X			
<u>DUP-47</u>	52												X			
A01-25-B-2:2	53		1213										X			
A01-25-SW-7:1	54		1215										X			
A01-25-B-14:1	55		1216										X			
A01-25-B-2:3	56		1219													HOLD
A01-25-B-14:2	57		1222													HOLD
A01-25-B-13:1	58		1230										X			
A01-25-B-3:2	59		1233										X			
A01-25-B-13:2	60		1236													HOLD

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bryna, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: <u>Betsy Wing</u>	Relinquished by: <u>Betsy Wing</u>	Relinquished by: <u>EP1</u>	Relinquished by: <u>EP1</u>
Received by: <u>M. L. L. L.</u>	Received by: <u>M. L. L. L.</u>	Received by: <u>EP1</u>	Received by: <u>EP1</u>
Relinquished by:	Relinquished by:	Relinquished by:	Relinquished by:
Received by:	Received by:	Received by:	Received by:

987061

SAMPLE CHAIN OF CUSTODY

ME 07-03-19

Page #

7

of

8

nos

Report To Thom Morris, Betty Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 425 395-0050 Email thom@epi-wa.com

betty@epi-wa.com

SAMPLERS (signature) Kibria Bazzia

PROJECT NAME Brookdale

PO # 74001.1

REMARKS

INVOICE TO Idig USA

TURNAROUND TIME

☐ Standard Turnaround

☒ RUSH 10 day TAT

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other

ANALYSES REQUESTED

TPH-HCID
TPH-Diesel
TPH-Gasoline
BTEX by 8021B
VOCs by 8260C
SVOCs by 8270D
PAHs 8270D SIM
Method 8081-
Dieldrin
Method 8081-
Full Site

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081- Dieldrin Method 8081- Full Site	Notes
A01-25-B-1a:1	61	7/2/19	1240	Soil	1								X	
A01-25-B-3:3	62		1241											HOLD
A01-25-B-1a:2	63		1246										X	HOLD
A01-25-SW-1:1	64		1249										X	
A01-25-B-4:2	65		1253										X	
A01-25-SW-2:1	66		1259										X	
A01-25-B-4:3	67		1303											HOLD
A01-25-SW-3:1	68		1307										X	
A01-25-SW-4:0.5	69		1309										X	
A01-25-SW-5:0.5	70		1311										X	

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by: Betty Wing

Betty Wing

EP1

7/3/19

6:15

Received by: Michael Eckel

Michael Eckel

FIR

7/3/19

+

Relinquished by:

Samples received at 2 °C

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 235-8282

907061

SAMPLE CHAIN OF CUSTODY

ME 07-03-19 8 of 8 nos

Report To: Thom Mann, Betsy Wing

Company: EP1

Address: 1180 NW Maple St, Ste 310

City, State, ZIP: Issaquah, WA 98027

Phone: 425-395-0010 Email: thommann@epi-wa.com

SAMPLERS (signature) <u>Rebecca Brecken</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS <u>14 mg ISO</u>	INVOICE TO <u>USA</u>
TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH 10 day <u>TA</u> Rush charges authorized by: _____	
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8061	Method 8062	Method 8063	
Dup-48	71	7/2/19	—	Soil	1								X			pc BW
Dup-49	72		—		1								X			7/18/19 ME
A01-25-B-11:2	73		1312		1								X			HOLD
A01-25-B-11:3	74		1316		1								X			
Dup-50	75		—		—								X			
A01-25-B-5:1.5	76		1321		1								X			
A01-25-B-10:2	77		1326		1								X			HOLD
A01-25-B-5:2.5	78		1331		1								X			
A01-25-B-10:3	79		1332		1								X			HOLD

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <u>Betsy Wing</u>		<u>Betsy Wing</u>		<u>EP1</u>		7/3/19	6:15
Received by: <u>Michael Bell</u>		<u>Michael Bell</u>		<u>EP1</u>		7/3/19	+
Relinquished by:							
Received by:							

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 17, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 907061

Dear Mr Morin:

Included are the results from the testing of material submitted on July 3, 2019 from the Brookdale 74001.1, F&BI 907061 project. There are 66 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0717R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 3, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 907061 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907061 -01	AOI-18-B-7:1
907061 -02	AOI-18-B-13:2
907061 -03	AOI-18-B-7:2
907061 -04	AOI-18-B-13:3
907061 -05	AOI-18-B-8:2.5
907061 -06	AOI-18-B-8:3.5
907061 -07	AOI-18-B-12:2
907061 -08	AOI-18-B-9:1.5
907061 -09	AOI-18-B-12:3
907061 -10	AOI-18-B-9:2.5
907061 -11	AOI-18-B-11:1
907061 -12	AOI-18-B-11:2
907061 -13	AOI-18-B-10:1
907061 -14	AOI-18-B-10:2
907061 -15	DUP-45
907061 -16	AOI-19-B-1:1
907061 -17	AOI-19-B-1:2
907061 -18	AOI-19-B-2:1.5
907061 -19	AOI-19-SW-1:1
907061 -20	AOI-19-B-2:2.5
907061 -21	AOI-19-B-3:1.5
907061 -22	AOI-19-B-3:2.5
907061 -23	AOI-19-SW-2:0.5
907061 -24	AOI-19-SW-3:0.5
907061 -25	AOI-19-B-4:1.5
907061 -26	AOI-19-B-4:2.5
907061 -27	AOI-19-SW-4:0.5
907061 -28	AOI-24-B-1:1.5
907061 -29	AOI-24-B-1:2.5
907061 -30	AOI-24-SW-1:0.5
907061 -31	AOI-24-SW-2:0.5
907061 -32	AOI-24-B-2:1
907061 -33	AOI-24-B-2:2
907061 -34	AOI-24-SW-3:1
907061 -35	AOI-24-SW-4:1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (Continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907061 -36	AOI-24-B-3:2.5
907061 -37	AOI-24-SW-5:1
907061 -38	AOI-24-B-3:3.5
907061 -39	AOI-24-SW-6:0.5
907061 -40	AOI-24-B-4:2
907061 -41	AOI-24-SW-7:1
907061 -42	AOI-24-B-4:3
907061 -43	AOI-24-SW-8:0.5
907061 -44	AOI-24-B-6:2
907061 -45	AOI-24-B-5:1.5
907061 -46	AOI-24-B-5:2.5
907061 -47	AOI-24-B-6:3
907061 -48	DUP-46
907061 -49	AOI-25-B-1:2
907061 -50	AOI-25-B-1:3
907061 -51	AOI-25-SW-6:1
907061 -52	DUP-47
907061 -53	AOI-25-B-2:2
907061 -54	AOI-25-SW-7:1
907061 -55	AOI-25-B-14:1
907061 -56	AOI-25-B-2:3
907061 -57	AOI-25-B-14:2
907061 -58	AOI-25-B-13:1
907061 -59	AOI-25-B-3:2
907061 -60	AOI-25-B-13:2
907061 -61	AOI-25-B-12:1
907061 -62	AOI-25-B-3:3
907061 -63	AOI-25-B-12:2
907061 -64	AOI-25-SW-1:1
907061 -65	AOI-25-B-4:2
907061 -66	AOI-25-SW-2:1
907061 -67	AOI-25-B-4:3
907061 -68	AOI-25-SW-3:1
907061 -69	AOI-25-SW-4:0.5
907061 -70	AOI-25-SW-5:0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (Continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907061 -71	DUP-48
907061 -72	DUP-49
907061 -73	AOI-25-B-11:2
907061 -74	AOI-25-B-11:3
907061 -75	DUP-50
907061 -76	AOI-25-B-5:1.5
907061 -77	AOI-25-B-10:2
907061 -78	AOI-25-B-5:2.5
907061 -79	AOI-25-B-10:3

The 8081B calibration standard failed the acceptance criteria for the surrogate DBC in several samples. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-B-7:1	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-01 1/6
Date Analyzed:	07/09/19	Data File:	070929.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-B-13:2	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/10/19	Lab ID:	907061-02 1/6
Date Analyzed:	07/11/19	Data File:	071130.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-B-8:2.5	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-05 1/6
Date Analyzed:	07/09/19	Data File:	070930.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.012

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-B-12:2	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-07 1/6
Date Analyzed:	07/09/19	Data File:	070931.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.017

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-B-9:1.5	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-08 1/6
Date Analyzed:	07/09/19	Data File:	070932.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.048

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-B-11:1	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-11 1/6
Date Analyzed:	07/09/19	Data File:	070933.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.38

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-B-10:1	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-13 1/6
Date Analyzed:	07/09/19	Data File:	070934.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.033

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-45	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/10/19	Lab ID:	907061-15 1/60
Date Analyzed:	07/12/19	Data File:	071233.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73 d	50	150
DBC	81 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	2.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-B-1:1	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-16 1/6
Date Analyzed:	07/09/19	Data File:	070936.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-B-2:1.5	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-18 1/6
Date Analyzed:	07/09/19	Data File:	070937.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-SW-1:1	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/10/19	Lab ID:	907061-19 1/6
Date Analyzed:	07/11/19	Data File:	071131.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.84 ve
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-SW-1:1	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/10/19	Lab ID:	907061-19 1/60
Date Analyzed:	07/15/19	Data File:	071505.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75 d	50	150
DBC	79 d	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.1
gamma-BHC (Lindane)	<0.1
beta-BHC	<0.1
delta-BHC	<0.1
Heptachlor	<0.1
Aldrin	<0.1
Heptachlor Epoxide	<0.1
trans-Chlordane	<0.1
cis-Chlordane	<0.1
4,4'-DDE	<0.1
Endosulfan I	<0.1
Dieldrin	0.84
Endrin	<0.1
4,4'-DDD	<0.1
Endosulfan II	<0.1
4,4'-DDT	<0.1
Endrin Aldehyde	<0.1
Methoxychlor	<0.1
Endosulfan Sulfate	<0.1
Endrin Ketone	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-B-3:1.5	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-21 1/6
Date Analyzed:	07/09/19	Data File:	070938.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	109	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.26

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-SW-2:0.5	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-23 1/6
Date Analyzed:	07/09/19	Data File:	070939.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	108	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.43

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-SW-3:0.5	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-24 1/6
Date Analyzed:	07/09/19	Data File:	070941.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	108 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.24

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-B-4:1.5	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-25 1/6
Date Analyzed:	07/09/19	Data File:	070942.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	108 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-SW-4:0.5	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/10/19	Lab ID:	907061-27 1/6
Date Analyzed:	07/11/19	Data File:	071132.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-B-1:1.5	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-28 1/6
Date Analyzed:	07/09/19	Data File:	070943.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	105 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-SW-1:0.5	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-30 1/6
Date Analyzed:	07/09/19	Data File:	070944.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	110 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-SW-2:0.5	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/10/19	Lab ID:	907061-31 1/6
Date Analyzed:	07/11/19	Data File:	071133.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-B-2:1	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-32 1/6
Date Analyzed:	07/09/19	Data File:	070945.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	109 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-SW-3:1	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/10/19	Lab ID:	907061-34 1/60
Date Analyzed:	07/12/19	Data File:	071234.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79 d	50	150
DBC	83 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.79

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-SW-4:1	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-35 1/6
Date Analyzed:	07/10/19	Data File:	070947.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	102 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.011

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-B-3:2.5	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-36 1/6
Date Analyzed:	07/10/19	Data File:	070948.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	110 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-SW-5:1	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-37 1/6
Date Analyzed:	07/10/19	Data File:	070949.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	104 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-SW-6:0.5	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-39 1/6
Date Analyzed:	07/10/19	Data File:	071010.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	103 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.33

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-B-4:2	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/10/19	Lab ID:	907061-40 1/6
Date Analyzed:	07/11/19	Data File:	071134.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-SW-7:1	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-41 1/6
Date Analyzed:	07/10/19	Data File:	071011.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.28

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-SW-8:0.5	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-43 1/6
Date Analyzed:	07/10/19	Data File:	071012.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	113	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-B-6:2	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-44 1/6
Date Analyzed:	07/10/19	Data File:	071013.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-B-5:1.5	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-45 1/6
Date Analyzed:	07/10/19	Data File:	071014.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	106	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-46	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-48 1/6
Date Analyzed:	07/10/19	Data File:	071015.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	106	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-1:2	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-49 1/6
Date Analyzed:	07/10/19	Data File:	071016.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	109	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-6:1	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-51 1/6
Date Analyzed:	07/10/19	Data File:	071017.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	105	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.15

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-47	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-52 1/6
Date Analyzed:	07/10/19	Data File:	071018.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.19

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-2:2	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-53 1/6
Date Analyzed:	07/10/19	Data File:	071019.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.039

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-7:1	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-54 1/6
Date Analyzed:	07/10/19	Data File:	071020.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	106	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-14:1	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-55 1/6
Date Analyzed:	07/10/19	Data File:	071026.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	106 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-13:1	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-58 1/6
Date Analyzed:	07/10/19	Data File:	071027.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	114 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.041

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-3:2	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-59 1/6
Date Analyzed:	07/10/19	Data File:	071028.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	109 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.014

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-12:1	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-61 1/6
Date Analyzed:	07/10/19	Data File:	071029.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	108 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-1:1	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-64 1/6
Date Analyzed:	07/10/19	Data File:	071030.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	103 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-4:2	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-65 1/6
Date Analyzed:	07/10/19	Data File:	071031.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	113 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-2:1	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-66 1/6
Date Analyzed:	07/10/19	Data File:	071032.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	112 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.047

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-3:1	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-68 1/6
Date Analyzed:	07/10/19	Data File:	071033.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	111 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.051

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-4:0.5	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/10/19	Lab ID:	907061-69 1/60
Date Analyzed:	07/12/19	Data File:	071235.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77 d	50	150
DBC	88 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-5:0.5	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/05/19	Lab ID:	907061-70 1/6
Date Analyzed:	07/06/19	Data File:	070609.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-48	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/05/19	Lab ID:	907061-71 1/6
Date Analyzed:	07/06/19	Data File:	070610.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	109	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.010

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-49	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/05/19	Lab ID:	907061-72 1/6
Date Analyzed:	07/06/19	Data File:	070611.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	108	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.012

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-11:2	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	907061-73 1/60
Date Analyzed:	07/10/19	Data File:	070953.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	94 d	50	150
DBC	116 d ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-50	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/05/19	Lab ID:	907061-75 1/6
Date Analyzed:	07/06/19	Data File:	070623.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	108	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.034

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-5:1.5	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/05/19	Lab ID:	907061-76 1/6
Date Analyzed:	07/06/19	Data File:	070624.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.028

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-10:2	Client:	Environmental Partners
Date Received:	07/03/19	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/05/19	Lab ID:	907061-77 1/6
Date Analyzed:	07/06/19	Data File:	070625.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	90	50	150
DBC	117	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.063

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	09-1608 mb 1/6
Date Analyzed:	07/09/19	Data File:	070925.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	92	50	150
DBC	108	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/08/19	Lab ID:	09-1610 mb 1/6
Date Analyzed:	07/10/19	Data File:	071006.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	93	50	150
DBC	121 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/05/19	Lab ID:	09-1611 mb 1/6
Date Analyzed:	07/06/19	Data File:	070605.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	99	50	150
DBC	124	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907061
Date Extracted:	07/10/19	Lab ID:	09-1643 mb 1/6
Date Analyzed:	07/11/19	Data File:	071111.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	111	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/17/19

Date Received: 07/03/19

Project: Brookdale 74001.1, F&BI 907061

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907061-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	89	93	45-130	4

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	110	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/17/19

Date Received: 07/03/19

Project: Brookdale 74001.1, F&BI 907061

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907061-39 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.31	92 b	122 b	45-130	28 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	110	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/17/19

Date Received: 07/03/19

Project: Brookdale 74001.1, F&BI 907061

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907061-70 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	95	102	45-130	7

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	105	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/17/19

Date Received: 07/03/19

Project: Brookdale 74001.1, F&BI 907061

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR ORGANOCHLORINE PESTICIDES BY EPA METHOD 8081B

Laboratory Code: 907125-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	<0.01	82	88	45-111	7
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	<0.01	89	93	50-117	4
beta-BHC	mg/kg (ppm)	0.1	<0.01	87	92	49-109	6
delta-BHC	mg/kg (ppm)	0.1	<0.01	90	93	39-114	3
Heptachlor	mg/kg (ppm)	0.1	<0.01	105	112	40-131	6
Aldrin	mg/kg (ppm)	0.1	<0.01	88	93	44-121	6
Heptachlor Epoxide	mg/kg (ppm)	0.1	<0.01	91	95	46-122	4
trans-Chlordane	mg/kg (ppm)	0.1	<0.01	90	94	41-129	4
cis-Chlordane	mg/kg (ppm)	0.1	<0.01	93	96	44-120	3
4,4'-DDE	mg/kg (ppm)	0.1	<0.01	84	87	50-150	4
Endosulfan I	mg/kg (ppm)	0.1	<0.01	87	91	45-124	4
Dieldrin	mg/kg (ppm)	0.1	<0.01	91	95	45-130	4
Endrin	mg/kg (ppm)	0.1	<0.01	111	113	50-140	2
4,4'-DDD	mg/kg (ppm)	0.1	<0.01	105	108	26-155	3
Endosulfan II	mg/kg (ppm)	0.1	<0.01	85	88	40-135	3
4,4'-DDT	mg/kg (ppm)	0.1	<0.01	102	104	50-150	2
Endrin Aldehyde	mg/kg (ppm)	0.1	<0.01	86	90	35-139	5
Methoxychlor	mg/kg (ppm)	0.1	<0.01	109	121	28-162	10
Endosulfan Sulfate	mg/kg (ppm)	0.1	<0.01	94	96	40-141	2
Endrin Ketone	mg/kg (ppm)	0.1	<0.01	99	102	41-147	3
Toxaphene	mg/kg (ppm)	4	<1	73	77	50-150	5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/17/19

Date Received: 07/03/19

Project: Brookdale 74001.1, F&BI 907061

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR ORGANOCHLORINE PESTICIDES BY EPA METHOD 8081B

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
alpha-BHC	mg/kg (ppm)	0.1	94	56-113
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	97	58-120
beta-BHC	mg/kg (ppm)	0.1	89	70-130
delta-BHC	mg/kg (ppm)	0.1	91	70-130
Heptachlor	mg/kg (ppm)	0.1	95	56-124
Aldrin	mg/kg (ppm)	0.1	112	70-130
Heptachlor Epoxide	mg/kg (ppm)	0.1	106	70-130
trans-Chlordane	mg/kg (ppm)	0.1	89	60-123
cis-Chlordane	mg/kg (ppm)	0.1	103	70-130
4,4'-DDE	mg/kg (ppm)	0.1	92	70-130
Endosulfan I	mg/kg (ppm)	0.1	119	62-124
Dieldrin	mg/kg (ppm)	0.1	97	70-130
Endrin	mg/kg (ppm)	0.1	100	56-147
4,4'-DDD	mg/kg (ppm)	0.1	94	54-137
Endosulfan II	mg/kg (ppm)	0.1	97	42-140
4,4'-DDT	mg/kg (ppm)	0.1	89	25-169
Endrin Aldehyde	mg/kg (ppm)	0.1	91	21-135
Methoxychlor	mg/kg (ppm)	0.1	95	54-154
Endosulfan Sulfate	mg/kg (ppm)	0.1	112	39-148
Endrin Ketone	mg/kg (ppm)	0.1	106	46-134
Toxaphene	mg/kg (ppm)	4	103	56-145

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

ME 07-03-19 1 of 8 AOS

Report To Thom Thon, Betsy Wng
 Company EP1
 Address 1180 NW Maple St, Suite 300
 City, State, ZIP Issaquah, WA
 Phone (425) 345-6010 Email thom@epi.wa.com
Betsy Wng

SAMPLERS (signature) <u>Alicia Beckwith</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>741601.1</u>
REMARKS	INVOICE TO <u>ICMJO USA</u>

TURNAROUND TIME Standard Turnaround <input type="checkbox"/> RUSH <u>10-day TAT</u> Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other
--	--

						ANALYSES REQUESTED										
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM		Notes		
A01-18-B-7:1	01	7/2/19	0749	Soil	1							X				
A01-18-B-13:2	02		0752										X			
A01-18-B-7:2	03		0753											HOLD		
A01-18-B-13:3	04		0758											HOLD		
A01-18-B-8:2.5	05		0803									X				
A01-18-B-8:3.5	06		0807											HOLD		
A01-18-B-12:2	07		0808										X			
A01-18-B-9:1.5	08		0813										X			
A01-18-B-12:3	09		0814											HOLD		
A01-18-B-9:2.5	10		0819											HOLD		

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <u>Betsy Wng</u>		<u>Betsy Wng</u>		<u>EP1</u>		<u>7/3/19</u>	<u>0615</u>
Received by: <u>Michael Ellis</u>		<u>Michael Ellis</u>		<u>ICMJO</u>		<u>7/3/19</u>	<u>4</u>
Relinquished by:							
Received by:							

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

907061

SAMPLE CHAIN OF CUSTODY

ME 07-03-19

Page # 2 of 8

8 nos

Report To Thom Morin, Betsy WingCompany EP1Address 1180 NW Maple St, Suite 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-2010 Email thom.morin@epi-va.com
betsy.wing@epi-va.com

SAMPLERS (signature) <u>Rebecca Beezin</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS	INVOICE TO <u>Whio US+</u>

TURNAROUND TIME Tag #	Standard Turnaround <input type="checkbox"/> RUSH <u>10-day 74T</u> Rush charges authorized by:
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other	

Background PH - Jan. 2021						ANALYSES REQUESTED										Notes
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081-1 Dieldrin	Method 8081-1 Full Site		
A01-18-B-11:1	11	7/21/19	0822	Soil	1								X			HOLD
A01-18-B-11:2	12		0828		1											
A01-18-B-10:1	13		0831		1								X			
A01-18-B-10:2	14		0833													HOLD
DUP-45	15		-										X			
A01-19-B-1:1	16		0906										X			
A01-19-B-1:2	17		0912													HOLD
A01-19-B-2:1.5	18		0914										X			
A01-19-SW-1:1	19		0915											X		
A01-19-B-2:2.5	20		0920													HOLD

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
<u>[Signature]</u>		<u>Betsy Wing</u>		<u>EP1</u>		<u>7/3/19</u>		<u>0615</u>	
Relinquished by:		<u>[Signature]</u>		<u>Michael E. C. C.</u>		<u>7/3/19</u>		<u>4</u>	
Received by:				<u>Samples received at</u>		<u>7.0C</u>			

SAMPLE CHAIN OF CUSTODY

ME 07-03-19

Page #

3 of 8 pgs

907061

Report To Thom Morin, Betsy Wing

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-1018 Email betsyw@epi.wa.com

thom@epi.wa.com

SAMPLERS (signature) <u>Rebecca Beecher</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS	INVOICE TO <u>Leijco USA</u>

TURNAROUND TIME Standard Turnaround <input type="checkbox"/> RUSH <u>10 day</u> <u>TH</u> Rush charges authorized by: _____	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____
--	--

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-19-B-3:1.5	21	7/2/19	0930	Soil	1							X	HOLD
A01-19-B-3:2.5	22		0936									X	
A01-19-SW-2:0.5	23		0937									X	
A01-19-SW-3:0.5	24		0939									X	
A01-19-B-4:1.5	25		0940									X	
A01-19-B-4:2.5	26		0944										HOLD
A01-19-SW-4:0.5	27		0945									X	
A01-24-B-1:1.5	28		1015									X	
A01-24-B-1:2.5	29		1017										HOLD
A01-24-SW-1:0.5	30		1020									X	

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: <u>Betsy Wing</u>	PRINT NAME	COMPANY	DATE	TIME
Received by: <u>Michael Leijco</u>	<u>Betsy Wing</u>	<u>EPI</u>	<u>7/3/19</u>	<u>6:15</u>
Relinquished by:				
Received by:		Samples received at <u>2</u> o'clock		

SAMPLE CHAIN OF CUSTODY

ME 07-03-19 4 of 8 Pgs

Report To Thom Main, Betsy Wing
 Company EPI
 Address 1180 NW Maple St, Suite 310
 City, State, ZIP Issaquah, WA 98027
 Phone 425-395-0010 Email thom@epi-wa.com
betsey@epi-wa.com

SAMPLES (signature) <u>Roberta Becerra</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS	INVOICE TO <u>Unijo USA</u>

TURNAROUND TIME Standard Turnaround <u>10 day TAT</u>
SAMPLE DISPOSAL <input type="checkbox"/> Standard after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other

ANALYSES REQUESTED						ANALYSES REQUESTED										Notes
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081-Diel drin	Method 8081-Full Suite		
A01-24-SW-2:0.5	31	7/2/19	1024	Soil	1								X	X		
A01-24-B-2:1	32		1025		1								X			
A01-24-B-2:2	33		1027		1											
A01-24-SW-3:1	34		1030										X			
A01-24-SW-4:1	35		1034										X			
A01-24-B-3:2.5	36		1037										X			
A01-24-SW-5:1	37		1038		1								X			
A01-24-B-3:3.5	38		1041													
A01-24-SW-6:0.5	39		1042										X			
A01-24-B-4:2	40		1045										X			

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>Betsy Wing</u>		Betsy Wing		EPI		7/3/19		6:15	
Received by: <u>Michael L. L.</u>		Michael L. L.		T-13 inc		7/3/19		1	
Relinquished by:									
Received by:				Samples received at <u>2</u> PC					

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

707061

SAMPLE CHAIN OF CUSTODY

ME 07-03-19

Page # 5 of 8

Report To Thom Main; Betsy Wing
Company EPI
Address 118D NW Maple St, Ste 310
City, State, ZIP Issaquah, WA 98027
Phone (425) 345-240 Email betsy@epi-wa.com
thom@epi-wa.com

SAMPLERS (signature) <u>Albera Baern</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS <u>1400 US4.</u>	INVOICE TO

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH <u>10 day TAT</u> Rush charges authorized by: _____	
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____	

FORM 47-1 (Rev. 10-1-10)						ANALYSES REQUESTED									
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 - Dieldrin	Method 8081 - Full Suite	Notes
A01-24-SW-7:1	41	7/2/19	1046	Soil	1								X		HOLD
A01-24-B-4:3	42		1049										X		
A01-24-SW-8:0.5	43		1052										X		
A01-24-B-6:2	44		1058										X		
A01-24-B-5:1.5	45		1101										X		
A01-24-B-5:2.5	46		1103												HOLD
A01-24-B-6:3	47		1104												HOLD
DUP-46	48		—										X		
A01-25-B-1:2	49		1158										X		
A01-25-B-1:3	50		1204												HOLD

SIGNED BY: <u>Betsy Wing</u>		PRINT NAME: <u>Betsy Wing</u>		COMPANY: <u>EPI</u>		DATE: <u>7/3/19</u>		TIME: <u>6:15</u>	
RECEIVED BY: <u>Michael Dell</u>				<u>1-WB</u>		<u>7/3/15</u>		<u>5</u>	
RELINQUISHED BY:									
RECEIVED BY:									

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

907061

SAMPLE CHAIN OF CUSTODY

ME 07-08-19

Page # 10 of 8

8 Abs

Report To Thom Marin, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email thommar@epi-wa.com
betsey.wing@epi-wa.com

SAMPLERS (signature) <u>Abea Beceira</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS	INVOICE TO <u>Idiyo USA</u>

TURNAROUND TIME <u>10 day 14T</u>
SAMPLE DISPOSAL <input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-25-SW-6:1	51	7/2/19	1205	Soil	1								
<u>Dup-47</u>	52												
A01-25-B-2:2	53		1213										
A01-25-SW-7:1	54		1215										
A01-25-B-14:1	55		1216										
A01-25-B-2:3	56		1219										
A01-25-B-14:2	57		1222										
A01-25-B-13:1	58		1230										
A01-25-B-3:2	59		1233										
A01-25-B-13:2	60		1236										

SIGNATURE

PRINT NAME

COMPANY

DATE TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: <u>Betsy Wing</u>	Relinquished by: <u>Michele Endl</u>	Received by: <u>Betsy Wing</u>	Received by: <u>Idiyo USA</u>
Relinquished by:	Relinquished by:	Received by:	Received by:

SAMPLE CHAIN OF CUSTODY

ME 07-03-19 7 of 8 pgs

Report To Thom Morn, Betty Wing

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0050 Email thom@epi-wa.com

betty@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

REMARKS

Brockdale

Kitea Brezza

PO #

74001.1

INVOICE TO

Idris USA

Page #

7

of

8 pgs

TURNAROUND TIME

☐ Standard Turnaround

☒ RUSH 10 day TAT

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other

ANALYSES REQUESTED

TPH-HCID
TPH-Diesel
TPH-Gasoline
BTEX by 8021B
VOCs by 8260C
SVOCs by 8270D
PAHs 8270D SIM

Method 8081-
Dieldrin
Method 8081-
Fall Site

Notes

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081- Dieldrin	Method 8081- Fall Site	Notes
A01-25-B-12:1	61	7/2/19	1240	Soil	1								X		
A01-25-B-3:3	62		1241												HOLD
A01-25-B-12:2	63		1246										X		HOLD
A01-25-SW-1:1	64		1249										X		
A01-25-B-4:2	65		1253										X		
A01-25-SW-2:1	66		1259										X		
A01-25-B-4:3	67		1303												HOLD
A01-25-SW-3:1	68		1307										X		
A01-25-SW-4:0.5	69		1309										X		
A01-25-SW-5:0.5	70		1311										X		

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by:

Received by:

Relinquished by:

Received by:

Betsy Wing

Michael Ellis

EPI

FIRB

7/3/19

7/3/19

6:15

+

Samples received at 2:00

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 31, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 907087

Dear Mr Morin:

Included are the additional results from the testing of material submitted on July 5, 2019 from the Brookdale 74001.1, F&BI 907087 project. There are 17 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0731R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 5, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 907087 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907087 -01	AOI-25-B-7:2
907087 -02	AOI-25-B-9:2
907087 -03	AOI-25-B-9:3
907087 -04	AOI-25-B-7:3
907087 -05	AOI-25-B-6:2
907087 -06	AOI-25-B-8:2
907087 -07	AOI-25-B-6:3
907087 -08	AOI-25-B-8:3
907087 -09	AOI-29-B-1:1
907087 -10	AOI-29-SW-1:0.25
907087 -11	AOI-29-B-1:2
907087 -12	AOI-29-SW-2:0.5
907087 -13	AOI-29-SW-3:0.5
907087 -14	AOI-29-SW-4:0.5
907087 -15	AOI-30-B-1:1
907087 -16	AOI-30-B-1:2
907087 -17	AOI-30-SW-3:0.5
907087 -18	AOI-30-B-2:2
907087 -19	AOI-30-SW-4:0.5
907087 -20	AOI-30-SW-5:0.5
907087 -21	AOI-30-B-2:3
907087 -22	AOI-30-SW-6:0.5
907087 -23	AOI-30-SW-7:1
907087 -24	AOI-30-SW-1:1
907087 -25	Dup-51
907087 -26	Dup-52
907087 -27	Dup-53
907087 -28	AOI-30-B-3:2
907087 -29	AOI-30-SW-2:1
907087 -30	AOI-30-B-3:3
907087 -31	AOI-30-B-4:1.5
907087 -32	AOI-30-B-4:2.5
907087 -33	AOI-30-B-5:2
907087 -34	AOI-30-B-7:1.5
907087 -35	AOI-30-B-5:3
907087 -36	AOI-30-B-6:2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907087 -37	AOI-30-B-7:2.5
907087 -38	AOI-30-B-6:3
907087 -39	AOI-30-B-8:1.5
907087 -40	AOI-30-B-8:2.5
907087 -41	AOI-30-B-9:1.5
907087 -42	AOI-30-B-15:1.5
907087 -43	AOI-30-B-9:2.5
907087 -44	AOI-30-B-15:2.5
907087 -45	AOI-30-B-10:1
907087 -46	AOI-30-B-10:2
907087 -47	AOI-30-B-14:1
907087 -48	AOI-30-B-11:2
907087 -49	AOI-30-B-14:2
907087 -50	AOI-30-B-11:3
907087 -51	AOI-30-B-13:1
907087 -52	AOI-30-B-13:2
907087 -53	AOI-30-B-12:2
907087 -54	AOI-30-B-12:3

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-9:3	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/19/19	Lab ID:	907087-03 1/6
Date Analyzed:	07/19/19	Data File:	071944.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.091

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-7:3	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/19/19	Lab ID:	907087-04 1/6
Date Analyzed:	07/19/19	Data File:	071945.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-6:3	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/19/19	Lab ID:	907087-07 1/6
Date Analyzed:	07/19/19	Data File:	071946.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.25

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-8:3	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/19/19	Lab ID:	907087-08 1/6
Date Analyzed:	07/19/19	Data File:	071947.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.011

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-1:2	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/19/19	Lab ID:	907087-16 1/6
Date Analyzed:	07/19/19	Data File:	071948.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-2:3	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/22/19	Lab ID:	907087-21 1/6
Date Analyzed:	07/23/19	Data File:	072327.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.022

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-8:2.5	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/22/19	Lab ID:	907087-40 1/6
Date Analyzed:	07/23/19	Data File:	072328.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.047

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-15:2.5	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/19/19	Lab ID:	907087-44 1/6
Date Analyzed:	07/20/19	Data File:	071949.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-13:2	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/19/19	Lab ID:	907087-52 1/6
Date Analyzed:	07/20/19	Data File:	071950.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-12:3	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/19/19	Lab ID:	907087-54 1/6
Date Analyzed:	07/20/19	Data File:	071951.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.12

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/19/19	Lab ID:	09-1745 mb 1/6
Date Analyzed:	07/19/19	Data File:	071928.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	94	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/22/19	Lab ID:	09-1756 mb 1/6
Date Analyzed:	07/23/19	Data File:	072312.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	90	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/31/19

Date Received: 07/05/19

Project: Brookdale 74001.1, F&BI 907087

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907024-10 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.11	43 b	76 b	45-130	55 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	96	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/31/19

Date Received: 07/05/19

Project: Brookdale 74001.1, F&BI 907087

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907125-32 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.027	85 b	61 b	45-130	33 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	97	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

907087

SAMPLE CHAIN OF CUSTODY

ME 07-05-19

1 of 10 Pgs

Report To Thom Minin, Betsy KingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0810 Email thom@epi-wa.combetsy@epi-wa.com

SAMPLERS (signature)

Rebecca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

Invoice to USFTURNAROUND TIME
age # 1 of 10☐ Standard Turnaround
☒ RUSH 10 day 1AT
Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

TPH-HCID
TPH-Diesel
TPH-Gasoline
BTEX by 8021B
VOCs by 8260C
SVOCs by 8270D
PAHs 8270D SIM
Method 8081
Dieldrin
Method 8081
Full Suiteper SW
7/10/19
Notes ME

ANALYSES REQUESTED													
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-25-B-7:2	01	7/31/19	0850	Soil	1							X	
A01-25-B-9:2	02		0851		1							X	
A01-25-B-9:3	03		0853		1							X	
A01-25-B-7:3	04		0856		1							X	
A01-25-B-6:2	05		0859		1							X	
A01-25-B-8:2	06		0902		1							X	
A01-25-B-6:3	07		0903		1							X	
A01-25-B-8:3	08		0910		1							X	
A01-29-B-1:1	09		0922		1							X	
A01-29-SW-1:0.25	10		0929		1							X	
Method 8081 Dieldrin Method 8081 Full suite													
per SW 7/10/19 Notes ME													

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: Rebecca BecerraRelinquished by: Rebecca BecerraRelinquished by: Michael ELLIRelinquished by: Michael ELLIRelinquished by: Michael ELLIReceived by: Michael ELLI

907087

SAMPLE CHAIN OF CUSTODY

ME 07-05-19

Page # 2 of 6

Report To Theresa Morin, Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email theresa.morin@epi-wa.com

Betsy Wing, Betsy Wing, Betsy Wing

SAMPLERS (signature)

PROJECT NAME

Rebecca Breanna

REMARKS

PO #

Brookdale

74001.1

INVOICE TO

1clive USA

TURNAROUND TIME

Standard Turnaround

RUSH 10 day -TAT

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Standard Turnaround
☐ RUSH 10 day -TAT
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081-1 Diels Alder Method 8081-1 Full Suite	Notes
AD1-29-B-1:2	11	7/3/19	0930	Soil	1									HOLD
AD1-29-SW-2:0.5	12		0931											
AD1-29-SW-3:0.5	13		0933											
AD1-29-SW-4:0.5	14		0935											
AD1-30-B-1:1	15		1040											
AD1-30-B-1:2	16		1046											HOLD
AD1-30-SW-3:0.5	17		1049											
AD1-30-B-2:2	18		1050											
AD1-30-SW-4:0.5	19		1051											
AD1-30-SW-5:0.5	20	✓	1053	✓	✓									

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Pl. (206) 285-8282

Relinquished by:

Rebecca Breanna

Rebecca

Becerra

EP1

7/3/19

1500

0615

Relinquished by:

Michael E. Kelly

Michael E. Kelly

F48m

7/3/19

0615

0615

0615

Received by:

Michael E. Kelly

Michael E. Kelly

F48m

7/3/19

0615

0615

0615

907087

SAMPLE CHAIN OF CUSTODY

ME 07-05-19

Page # 3 of 6 pgs

Report To Thom Morin, Betsy Wang

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email thom@epi-wa.com

betsy@epi-wa.com

SAMPLERS (signature) <u>Rebecca Decerra</u>	
PROJECT NAME	PO #
<u>Brookdale</u>	
REMARKS	INVOICE TO
	<u>14001.1</u>
	<u>Idaho USA</u>

TURNAROUND TIME
<input type="checkbox"/> Standard Turnaround
<input checked="" type="checkbox"/> RUSH 10 day TAT
Rush charges authorized by:
SAMPLE DISPOSAL
<input type="checkbox"/> Dispose after 30 days
<input checked="" type="checkbox"/> Archive Samples
<input type="checkbox"/> Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081-1 Fieldrin	Method 8081-1 Full Suite		
A01-30-B-2:3	21	7/3/19	1058	Soil	1											Hold
A01-30-SW-6:D,5	22		1101													
A01-30-SW-7:1	23		1103													
A01-30-SW-1:1	24		1105													
DWP-51	25															
DWP-52	26															
DWP-53	27															
A01-30-B-3:2	28		1106													
A01-30-SW-2:1	29		1107													
A01-30-B-3:3	30		1112													Hold

7/19/19 Off-hold CLM

SIGNATURE		PRINT NAME		COMPANY	DATE	TIME
Relinquished by:	<u>Rebecca Decerra</u>	Rebecca Decerra				
Received by:	<u>Michael Celli</u>	Michael Celli		EPI	7/3/19	1500
Relinquished by:				Fibm	7/3/19	0615
Received by:						

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

907687

SAMPLE CHAIN OF CUSTODY

ME 07-05-19 4 of 6 A05

Report To Thom Morin, Betsy Wing
 Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email thom@epi-wa.com

Betsy Wing EPI-WA.com

SAMPLERS (signature) Rebecca Becerra
 PROJECT NAME

Bookdale

PO #

74001.1

REMARKS

INVOICE TO

10110 USA

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 10 day TAT
 Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-30-B-4:1.5	31	7/8/19	1118	Soil	1							X	HOLD
A01-30-B-4:2.5	32		1126									X	HOLD
A01-30-B-5:2	33		1156									X	
A01-30-B-7:1.5	34		1201									X	
A01-30-B-5:3	35		1202										HOLD
A01-30-B-6:2	36		1204									X	
A01-30-B-7:2.5	37		1205										HOLD
A01-30-B-6:3	38		1210										HOLD
A01-30-B-8:1.5	39		1211										
A01-30-B-8:2.5	40		1213										HOLD

7/19/19 off hold
 CLM

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: Rebecca Becerra

Received by: Michael E. Clm

Rebecca Becerra

Michael E. Clm

EPI

FWS

7/31/19 1500

7/15/16 0611

Received by:

907087

SAMPLE CHAIN OF CUSTODY

ME 07-05-19

5 of 405

Report To Thom Maxim, Betsy WlingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0060 Email thommax@epi-wa.com

betsyw@epi-wa.com

Page #

TURNAROUND TIME

Standard Turnaround

RUSH 10 day 7/17

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Archive Samples

Other

SAMPLERS (signature)

PROJECT NAME

PO #

Brookdale

74001.1

REMARKS

INVOICE TO

Idaho USA

ANALYSES REQUESTED

TPH-HCID

TPH-Diesel

TPH-Gasoline

BTEX by 8021B

VOCs by 8260C

SVOCs by 8270D

PAHs 8270D SIM

Method 8081 -
DieldrinMethod 8081 -
full suite

Notes

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 - Dieldrin	Method 8081 - full suite	Notes
A01-30-B-9:1.5	41	7/3/19	1221	Soil	1									X	
A01-30-B-15:1.5	42		1224											X	
A01-30-B-9:2.5	43		1227												HOLD
A01-30-B-15:2.5	44		1232												HOLD
A01-30-B-10:1	45		1235											X	
A01-30-B-10:2	46		1237												HOLD
A01-30-B-14:1	47		1244											X	
A01-30-B-11:2	48		1245											X	
A01-30-B-14:2	49		1250												HOLD
A01-30-B-11:3	50		1251												HOLD

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: Rebecca BecerraRelinquished by: Rebecca BecerraRelinquished by: Michael EllisRelinquished by: EP1Relinquished by: 7/3/19 1500Received by: Michael EllisReceived by: Michael EllisReceived by: EP1Received by: 7/15/19Received by: 0615

Received by:

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 17, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 907087

Dear Mr Morin:

Included are the results from the testing of material submitted on July 5, 2019 from the Brookdale 74001.1, F&BI 907087 project. There are 44 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0717R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 5, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 907087 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907087 -01	AOI-25-B-7:2
907087 -02	AOI-25-B-9:2
907087 -03	AOI-25-B-9:3
907087 -04	AOI-25-B-7:3
907087 -05	AOI-25-B-6:2
907087 -06	AOI-25-B-8:2
907087 -07	AOI-25-B-6:3
907087 -08	AOI-25-B-8:3
907087 -09	AOI-29-B-1:1
907087 -10	AOI-29-SW-1:0.25
907087 -11	AOI-29-B-1:2
907087 -12	AOI-29-SW-2:0.5
907087 -13	AOI-29-SW-3:0.5
907087 -14	AOI-29-SW-4:0.5
907087 -15	AOI-30-B-1:1
907087 -16	AOI-30-B-1:2
907087 -17	AOI-30-SW-3:0.5
907087 -18	AOI-30-B-2:2
907087 -19	AOI-30-SW-4:0.5
907087 -20	AOI-30-SW-5:0.5
907087 -21	AOI-30-B-2:3
907087 -22	AOI-30-SW-6:0.5
907087 -23	AOI-30-SW-7:1
907087 -24	AOI-30-SW-1:1
907087 -25	Dup-51
907087 -26	Dup-52
907087 -27	Dup-53
907087 -28	AOI-30-B-3:2
907087 -29	AOI-30-SW-2:1
907087 -30	AOI-30-B-3:3
907087 -31	AOI-30-B-4:1.5
907087 -32	AOI-30-B-4:2.5
907087 -33	AOI-30-B-5:2
907087 -34	AOI-30-B-7:1.5
907087 -35	AOI-30-B-5:3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (Continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907087 -36	AOI-30-B-6:2
907087 -37	AOI-30-B-7:2.5
907087 -38	AOI-30-B-6:3
907087 -39	AOI-30-B-8:1.5
907087 -40	AOI-30-B-8:2.5
907087 -41	AOI-30-B-9:1.5
907087 -42	AOI-30-B-15:1.5
907087 -43	AOI-30-B-9:2.5
907087 -44	AOI-30-B-15:2.5
907087 -45	AOI-30-B-10:1
907087 -46	AOI-30-B-10:2
907087 -47	AOI-30-B-14:1
907087 -48	AOI-30-B-11:2
907087 -49	AOI-30-B-14:2
907087 -50	AOI-30-B-11:3
907087 -51	AOI-30-B-13:1
907087 -52	AOI-30-B-13:2
907087 -53	AOI-30-B-12:2
907087 -54	AOI-30-B-12:3

The 8081B calibration standard failed the acceptance criteria for the surrogate DBC.
The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-7:2	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-01 1/60
Date Analyzed:	07/12/19	Data File:	071238.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76 d	50	150
DBC	91 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.52

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-9:2	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-02 1/6
Date Analyzed:	07/10/19	Data File:	071040.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	108 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.066

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-6:2	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-05 1/6
Date Analyzed:	07/10/19	Data File:	071043.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	106 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.20

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-8:2	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-06 1/6
Date Analyzed:	07/10/19	Data File:	071044.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	97 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.16

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-29-B-1:1	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-09 1/6
Date Analyzed:	07/10/19	Data File:	071045.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	104 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-29-SW-1:0.25	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/10/19	Lab ID:	907087-10 1/6
Date Analyzed:	07/11/19	Data File:	071135.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.056
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-29-SW-2:0.5	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-12 1/6
Date Analyzed:	07/10/19	Data File:	071046.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	108 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-29-SW-3:0.5	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-13 1/6
Date Analyzed:	07/11/19	Data File:	071047.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	101 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-29-SW-4:0.5	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-14 1/6
Date Analyzed:	07/11/19	Data File:	071048.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	105 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-1:1	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-15 1/6
Date Analyzed:	07/11/19	Data File:	071049.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	98 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.081

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-SW-3:0.5	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-17 1/6
Date Analyzed:	07/11/19	Data File:	071050.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	109 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-2:2	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-18 1/60
Date Analyzed:	07/12/19	Data File:	071239.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78 d	50	150
DBC	89 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.52

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-SW-4:0.5	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-19 1/6
Date Analyzed:	07/11/19	Data File:	071052.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	111 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.015

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-SW-5:0.5	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-20 1/6
Date Analyzed:	07/11/19	Data File:	071053.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	113 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-SW-6:0.5	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-22 1/6
Date Analyzed:	07/11/19	Data File:	071054.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	117 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.012

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-SW-7:1	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-23 1/6
Date Analyzed:	07/11/19	Data File:	071055.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	105 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.033

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-SW-1:1	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-24 1/6
Date Analyzed:	07/11/19	Data File:	071056.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	106 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.017

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-51	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-25 1/6
Date Analyzed:	07/11/19	Data File:	071057.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	93 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-52	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-26 1/6
Date Analyzed:	07/11/19	Data File:	071058.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	112 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.051

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-53	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-27 1/6
Date Analyzed:	07/11/19	Data File:	071059.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	110 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.27

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-3:2	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-28 1/6
Date Analyzed:	07/11/19	Data File:	071060.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	110 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-SW-2:1	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-29 1/6
Date Analyzed:	07/11/19	Data File:	071149.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.065

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-4:1.5	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-31 1/6
Date Analyzed:	07/11/19	Data File:	071150.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-5:2	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-33 1/6
Date Analyzed:	07/11/19	Data File:	071151.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.044

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-7:1.5	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-34 1/6
Date Analyzed:	07/12/19	Data File:	071152.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	58	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-6:2	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-36 1/6
Date Analyzed:	07/12/19	Data File:	071153.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-8:1.5	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-39 1/6
Date Analyzed:	07/12/19	Data File:	071154.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.44

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-9:1.5	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/10/19	Lab ID:	907087-41 1/6
Date Analyzed:	07/11/19	Data File:	071136.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.012
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.011
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-15:1.5	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-42 1/6
Date Analyzed:	07/12/19	Data File:	071155.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.33

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-10:1	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-45 1/6
Date Analyzed:	07/12/19	Data File:	071156.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	58	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-14:1	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-47 1/6
Date Analyzed:	07/12/19	Data File:	071157.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-11:2	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-48 1/6
Date Analyzed:	07/12/19	Data File:	071158.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.014

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-13:1	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	907087-51 1/6
Date Analyzed:	07/12/19	Data File:	071159.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.094

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-12:2	Client:	Environmental Partners
Date Received:	07/05/19	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/10/19	Lab ID:	907087-53 1/6
Date Analyzed:	07/11/19	Data File:	071137.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.074
Heptachlor	<0.01
Aldrin	0.022
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.36
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	09-1639 mb 1/6
Date Analyzed:	07/10/19	Data File:	071035.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	88	50	150
DBC	119 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/09/19	Lab ID:	09-1640 mb 1/6
Date Analyzed:	07/11/19	Data File:	071145.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907087
Date Extracted:	07/10/19	Lab ID:	09-1643 mb 1/6
Date Analyzed:	07/11/19	Data File:	071111.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	111	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/17/19

Date Received: 07/05/19

Project: Brookdale 74001.1, F&BI 907087

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907087-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.51	368 b	31 b	45-130	169 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	110	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/17/19

Date Received: 07/05/19

Project: Brookdale 74001.1, F&BI 907087

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907087-29 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.049	80 b	75 b	45-130	6 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	99	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/17/19

Date Received: 07/05/19

Project: Brookdale 74001.1, F&BI 907087

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR ORGANOCHLORINE PESTICIDES BY EPA METHOD 8081B

Laboratory Code: 907125-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	<0.01	82	88	45-111	7
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	<0.01	89	93	50-117	4
beta-BHC	mg/kg (ppm)	0.1	<0.01	87	92	49-109	6
delta-BHC	mg/kg (ppm)	0.1	<0.01	90	93	39-114	3
Heptachlor	mg/kg (ppm)	0.1	<0.01	105	112	40-131	6
Aldrin	mg/kg (ppm)	0.1	<0.01	88	93	44-121	6
Heptachlor Epoxide	mg/kg (ppm)	0.1	<0.01	91	95	46-122	4
trans-Chlordane	mg/kg (ppm)	0.1	<0.01	90	94	41-129	4
cis-Chlordane	mg/kg (ppm)	0.1	<0.01	93	96	44-120	3
4,4'-DDE	mg/kg (ppm)	0.1	<0.01	84	87	50-150	4
Endosulfan I	mg/kg (ppm)	0.1	<0.01	87	91	45-124	4
Dieldrin	mg/kg (ppm)	0.1	<0.01	91	95	45-130	4
Endrin	mg/kg (ppm)	0.1	<0.01	111	113	50-140	2
4,4'-DDD	mg/kg (ppm)	0.1	<0.01	105	108	26-155	3
Endosulfan II	mg/kg (ppm)	0.1	<0.01	85	88	40-135	3
4,4'-DDT	mg/kg (ppm)	0.1	<0.01	102	104	50-150	2
Endrin Aldehyde	mg/kg (ppm)	0.1	<0.01	86	90	35-139	5
Methoxychlor	mg/kg (ppm)	0.1	<0.01	109	121	28-162	10
Endosulfan Sulfate	mg/kg (ppm)	0.1	<0.01	94	96	40-141	2
Endrin Ketone	mg/kg (ppm)	0.1	<0.01	99	102	41-147	3
Toxaphene	mg/kg (ppm)	4	<1	73	77	50-150	5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/17/19

Date Received: 07/05/19

Project: Brookdale 74001.1, F&BI 907087

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
alpha-BHC	mg/kg (ppm)	0.1	94	56-113
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	97	58-120
beta-BHC	mg/kg (ppm)	0.1	89	70-130
delta-BHC	mg/kg (ppm)	0.1	91	70-130
Heptachlor	mg/kg (ppm)	0.1	95	56-124
Aldrin	mg/kg (ppm)	0.1	112	70-130
Heptachlor Epoxide	mg/kg (ppm)	0.1	106	70-130
trans-Chlordane	mg/kg (ppm)	0.1	89	60-123
cis-Chlordane	mg/kg (ppm)	0.1	103	70-130
4,4'-DDE	mg/kg (ppm)	0.1	92	70-130
Endosulfan I	mg/kg (ppm)	0.1	119	62-124
Dieldrin	mg/kg (ppm)	0.1	97	70-130
Endrin	mg/kg (ppm)	0.1	100	56-147
4,4'-DDD	mg/kg (ppm)	0.1	94	54-137
Endosulfan II	mg/kg (ppm)	0.1	97	42-140
4,4'-DDT	mg/kg (ppm)	0.1	89	25-169
Endrin Aldehyde	mg/kg (ppm)	0.1	91	21-135
Methoxychlor	mg/kg (ppm)	0.1	95	54-154
Endosulfan Sulfate	mg/kg (ppm)	0.1	112	39-148
Endrin Ketone	mg/kg (ppm)	0.1	106	46-134
Toxaphene	mg/kg (ppm)	4	103	56-145

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

907087

SAMPLE CHAIN OF CUSTODY

ME 07-05-19

1 of 6 Pgs

Report To Thom Main; Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email thom@epi-wa.com
betsy@epi-wa.com

SAMPLES (signature)

PROJECT NAME

Brookdale

Rebecca Becerra

PO #

74001.1

REMARKS

INVOICE TO

14110
034

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 10 day 7/11
 Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 Dieldrin	Method 8081 Full Suite	Notes
A01-25-B-7:2	01	7/3/19	0850	Soil	1								X		
A01-25-B-9:2	02		0851		1								X		
A01-25-B-9:3	03		0853		1										HOLD
A01-25-B-7:3	04		0856		1										HOLD
A01-25-B-6:2	05		0859		1								X		
A01-25-B-8:2	06		0902		1								X		
A01-25-B-6:3	07		0903		1										HOLD
A01-25-B-8:3	08		0910		1										HOLD
A01-29-B-1:1	09		0922		1								X		
A01-29-SW-1:0.25	10		0929		1									X	

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: Rebecca Becerra

Rebecca Becerra

EPI

7/3/19 1500

Received by: Michael ELLI

Michael ELLI

FARM

7/5/19 0615

Relinquished by:

Received by:

Samples received at 6 °C

907087

SAMPLE CHAIN OF CUSTODY

ME 07-05-19

Page #

2

of

1005

Report To Thom Morin; Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email thom@epi-wa.combetsy@epi-wa.com

SAMPLERS (signature)

Rebecca Berra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

Chico USA

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 10 day TAI
 Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
AD1-29-B-1:2	11	7/3/19	0930	Soil	1								HOLD
AD1-29-SW-2:0.5	12		0931									X	
AD1-29-SW-3:0.5	13		0933									X	
AD1-29-SW-4:0.5	14		0935									X	
AD1-30-B-1:1	15		1040									X	
AD1-30-B-1:2	16		1046										HOLD
AD1-30-SW-3:0.5	17		1049									X	
AD1-30-B-2:2	18		1050									X	
AD1-30-SW-4:0.5	19		1051									X	
AD1-30-SW-5:0.5	20		1053									X	

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Reinquished by:

Rebecca BerraRebeccaBecerra

COMPANY

EP1

DATE

7/3/19

TIME

1500

Received by:

Michael E. HallMichael E. Hall

COMPANY

FIRM

DATE

7/5/19

TIME

0615

Received by:

119

3
2
6
AOS

☐ Standard Turnaround
~~XXXX~~ 10 day TAT
Rush charges authorized by:

☐ Standard Turnaround
☒ CRUSH 10 day TAT
Rush charges authorized by:

☐ Standard Turnaround
☒ CRUSH 10 day TAT
Rush charges authorized by:

SAMPLE DISPOSAL

☒ Archive Samples

W V GAAVZ

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>Rebecca Becerra</i>	Rebecca Becerra	EP1	7/3/19	1500
Received by: <i>[Signature]</i>	Michelle Hall	Fibm	7/3/15	0615
Relinquished by:				
Received by:				

907687

SAMPLE CHAIN OF CUSTODY

ME 07-05-19 4 of 6 A05

Report To Thom Morin, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email thom@epi-wa.combetsy@epi-wa.com

SAMPLERS (signature)

Rebecca Becerra

PROJECT NAME

Bookdale

PO #

74001.1

REMARKS

INVOICE TO

Idiyo USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 10 day TAT

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

TPH-HCID

TPH-Diesel

TPH-Gasoline

BTEX by 8021B

VOCs by 8260C

SVOCs by 8270D

PAHs 8270D SIM

Method 8061
Dieldrin
Method 8061
Full

Notes

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-30-B-4:1.5	31	7/8/19	1118	Soil	1								
A01-30-B-4:2.5	32		1126										HOLD
A01-30-B-5:2	33		1156										
A01-30-B-7:1.5	34		1201										
A01-30-B-5:3	35		1202										HOLD
A01-30-B-6:2	36		1204										
A01-30-B-7:2.5	37		1205										HOLD
A01-30-B-6:3	38		1210										HOLD
A01-30-B-8:1.5	39		1211										
A01-30-B-8:2.5	40		1213										HOLD

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: Rebecca BecerraReceived by: McKellellRebecca BecerraMcKellellEPI7/31/191500

Relinquished by:

Received by:

907087

SAMPLE CHAIN OF CUSTODY

ME 07-05-19

Page # 5 of 405

Report To Thom Marin, Betsy WlingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0010 Email thomm@epi-wa.combetsyw@epi-wa.com

SAMPLERS (signature)

Rebecca Boerger

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO
Idrigo
USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 10 day 7/17

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 - Dieckman	Method 8081 - Full Suite	Notes
A01-30-B-9:1.5	41	7/3/19	1221	Soil	1									X	
A01-30-B-15:1.5	42		1226		1								X		
A01-30-B-9:2.5	43		1227		1										HOLD
A01-30-B-15:2.5	44		1232		1										HOLD
A01-30-B-10:1	45		1235		1								X		
A01-30-B-10:2	46		1237		1										HOLD
A01-30-B-14:1	47		1244		1								X		
A01-30-B-11:2	48		1245		1								X		
A01-30-B-14:2	49		1250		1										HOLD
A01-30-B-11:3	50		1251		1										HOLD

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: Rebecca BoergerRelinquished by: Rebecca BoergerRelinquished by: Michael KellyRelinquished by: 7/15/19Relinquished by: 0615

Received by:

Received by:

Received by:

Received by:

Received by:

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 12, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 907125

Dear Mr Morin:

Included are the additional results from the testing of material submitted on July 9, 2019 from the Brookdale 74001.1, F&BI 907125 project. There are 7 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0812R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 9, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907125 -01	AOI-12-B-7:3
907125 -02	AOI-12-B-7:4
907125 -03	AOI-12-B-8:2
907125 -04	AOI-12-B-8:3
907125 -05	AOI-12-B-9:1.2
907125 -06	AOI-12-B-9:2.2
907125 -07	AOI-12-B-10:1.2
907125 -08	AOI-12-B-10:2.2
907125 -09	AOI-12-B-11:1.5
907125 -10	AOI-12-B-11:2.5
907125 -11	AOI-12-B-12:1.0
907125 -12	AOI-12-B-12:2.0
907125 -13	AOI-12-B-13:1.5
907125 -14	AOI-12-B-13:2.5
907125 -15	AOI-12-B-14:0.5
907125 -16	AOI-12-B-14:1.5
907125 -17	AOI-26-SW-1:0.5
907125 -18	AOI-26-SW-2:0.5
907125 -19	AOI-26-SW-3:0.5
907125 -20	AOI-26-SW-4:0.5
907125 -21	DUP-55
907125 -22	AOI-26-SW-5:0.5
907125 -23	AOI-26-SW-6:0.5
907125 -24	AOI-26-SW-7:0.5
907125 -25	AOI-26-B-2:1
907125 -26	AOI-26-B-2:2
907125 -27	AOI-26-B-1:1
907125 -28	AOI-26-B-1:2
907125 -29	AOI-26-B-5:1.5
907125 -30	AOI-26-B-5:2.5
907125 -31	AOI-26-B-4:1
907125 -32	AOI-26-B-4:2
907125 -33	AOI-26-B-3:1
907125 -34	AOI-26-B-3:2
907125 -35	DUP-56
907125 -36	DUP-57

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907125 -37	AOI-26-B-6:1.5
907125 -38	AOI-26-B-6:2.5
907125 -39	AOI-26-B-7:1.5
907125 -40	AOI-26-B-7:2.5
907125 -41	AOI-26-B-8:1
907125 -42	AOI-26-B-8:2
907125 -43	AOI-26-B-9:1
907125 -44	AOI-26-B-9:2
907125 -45	AOI-26-B-10:1
907125 -46	AOI-26-B-10:2
907125 -47	AOI-26-B-11:1
907125 -48	AOI-26-B-11:2
907125 -49	AOI-26-B-12:1.5
907125 -50	AOI-26-B-12:2.5
907125 -51	AOI-27-SW-1:1
907125 -52	AOI-27-SW-2:0.5
907125 -53	AOI-27-SW-3:0.5
907125 -54	AOI-27-SW-4:1
907125 -55	AOI-27-SW-6:0.8
907125 -56	AOI-27-SW-5:0.7
907125 -57	AOI-27-SW-8:0.5
907125 -58	AOI-27-SW-7:0.6
907125 -59	AOI-27-B-1:1.5
907125 -60	AOI-27-B-1:2.5
907125 -61	AOI-27-B-2:2
907125 -62	AOI-27-B-2:3
907125 -63	AOI-27-B-3:1.5
907125 -64	AOI-27-B-3:2.5
907125 -65	AOI-27-SW-9:1
907125 -66	AOI-27-B-4:1.5
907125 -67	AOI-27-B-4:2.5
907125 -68	AOI-27-SW-10:1.2
907125 -69	AOI-27-SW-11:0.8
907125 -70	AOI-27-SW-12:1
907125 -71	AOI-27-B-5:1.5
907125 -72	AOI-27-B-5:2.5
907125 -73	AOI-27-SW-13:0.6
907125 -74	AOI-27-SW-14:0.6
907125 -75	AOI-27-SW-15:0.6
907125 -76	AOI-27-B-6:1.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907125 -77	AOI-27-B-6:2.5
907125 -78	DUP-58
907125 -79	DUP-59
907125 -80	DUP-60
907125 -81	DUP-61
907125 -82	DUP-54

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-3:2	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	08/07/19	Lab ID:	907125-34 1/6
Date Analyzed:	08/07/19	Data File:	080720.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	08/07/19	Lab ID:	09-1932 mb 1/6
Date Analyzed:	08/07/19	Data File:	080706.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	105	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/12/19

Date Received: 07/09/19

Project: Brookdale 74001.1, F&BI 907125

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908015-02 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	86	86	45-130	0

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

907125

SAMPLE CHAIN OF CUSTODY

ME 07-09-17

1 of 9

903

Report To Thom Monica; Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425)395-0010 Email thommon@epi-wa.com
bsayue@epi-wa.comSAMPLERS (signature)
[Signature]
PROJECT NAME

PO #

74001.1

REMARKS

Brookdale

INVOICE TO

Ichijo USA

TURNAROUND TIME

☐ Standard Turnaround☐ RUSH 10-day

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other _____

ANALYSES REQUESTED

TPH-HCID
TPH-Diesel
TPH-Gasoline
BTEX by 8021B
VOCs by 8260C
SVOCs by 8270D
PAHs 8270D SIM
Method 8081
Diels Alder only
Method 8081
Full suite

Notes

						ANALYSES REQUESTED										Notes		
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081	Diels Alder only	Method 8081		Full suite	
A01-12-B-7:3	01	7/8/19	0815	Soil	1												X	
A01-12-B-7:4	02		0820		1													HOLD
A01-12-B-8:2	03		0830		1									X				
A01-12-B-8:3	04		0835		1													HOLD
A01-12-B-9:1.2	05		0845		1									X				
A01-12-B-9:2.2	06		0850		1													HOLD
A01-12-B-10:1.2	07		0855		1									X				
A01-12-B-10:2.2	08		0900		1													HOLD
A01-12-B-11:1.5	09		0905		1									X				
A01-12-B-11:2.5	10		0910		1													HOLD

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Received by:

[Signature]

Betsy Wing

EP1

7/9/19

0815

Received by:

[Signature]

Michael Elam

FRI

1

1

Relinquished by:

[Signature]

Michael Elam

FRI

1

1

Received by:

[Signature]

Michael Elam

FRI

1

1

Samples received at 2

00

907125

SAMPLE CHAIN OF CUSTODY

ME 07-09-19, 2 of 9

Report To Thom Morin, Betsy Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 345-0010 Email thom@epi-wa.com
betsy@epi-wa.com

SAMPLES (signature) <u>Betsy Wing</u> PROJECT NAME <u>Brookdale</u>		PO # <u>74001.1</u>
REMARKS <u>16x10 USA</u>		INVOICE TO <u>16x10 USA</u>
TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>10 day</u> Rush charges authorized by: _____ SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____		

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-12-B-12:1.0	11	7/8/19	0920	soil	1							X	HOLD
A01-12-B-12:2.0	12		0925										HOLD
A01-12-B-13:1.5	13		0930									X	HOLD
A01-12-B-13:2.5	14		0935										HOLD
A01-12-B-14:0.5	15		0940									X	HOLD
A01-12-B-14:1.5	16		0945										HOLD
A01-26-SW-1:0.5	17		1000									X	
A01-26-SW-2:0.5	18		1005									X	
A01-26-SW-3:0.5	19		1010									X	
A01-26-SW-4:0.5	20		1015									X	

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Requisitioned by: <u>Betsy Wing</u>	PRINT NAME <u>Betsy Wing</u>	COMPANY <u>EP1</u>	DATE <u>7/9/19</u>	TIME <u>0615</u>
Requisitioned by: <u>M. L. L. L.</u>	PRINT NAME <u>M. L. L. L.</u>	COMPANY <u>EP1</u>	DATE <u>7/9/19</u>	TIME <u>0615</u>
Received by:	PRINT NAME	COMPANY	DATE	TIME

907125

SAMPLE CHAIN OF CUSTODY

ME 07-09-19 3 of 9

Report To Thom Merrin, Betsy Wing
 Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 295-1010 Email thomm@epi-wa.com
betsyw@epi-wa.com

SAMPLES (signature) <u>Betsy Wing</u>		PO #
PROJECT NAME		74001.1
REMARKS		Brookdale
INVOICE TO		EP1

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH 10 day Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other
---	--

						ANALYSES REQUESTED										
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081 Field kit	method 8081 Full Suite	Notes	
Dup - 55	21	7/8/19	---	Soil	1								X			
A01-26-SW-5:0.5	22		1020										X			
A01-26-SW-6:0.5	23		1025										X			
A01-26-SW-7:0.5	24		1030										X			
A01-26-B-1:1			1050													
A01-26-B-2:1	25		1040										X			
A01-26-B-2:2	26		1045												HOLD	
A01-26-B-1:1	27		1050										X			
A01-26-B-1:2	28		1055										X			
A01-26-B-5:1.5	29		1100										X			

HOLD

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <u>Betsy Wing</u>		Betsy Wing		EP1		7/19/19	0618
Received by: <u>M. K. L. E. L. L.</u>		M. K. L. E. L. L.		Fiber			
Relinquished by:							
Received by:							

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

907125

SAMPLE CHAIN OF CUSTODY

ME 07-09-19 4 of 9 A03

Report To Theresa Moran Betsy WingCompany EP1Address 1180 NW Maple St. Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email thomson@epi-wa.com
rosary@epi-wa.com

SAMPLES (signature) <u>Rosary</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS	INVOICE TO <u>EP1</u>

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH 10 day <u>141</u> Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other
---	--

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081	method 8081	Full Suite	Notes	
A01-26-B-5-2.5	30	7/8/19	1105	soil	1								X				HOLD
A01-26-B-4-1	31		1110		1								X				
A01-26-B-4-2	32		1115		1												HOLD
A01-26-B-3-1	33		1117		1								X				
A01-26-B-3-2	34		1118														HOLD
A01-26-B-3-3	35												X				
A01-26-B-3-4	36												X				
A01-26-B-5-1.5	37		1100										X				Not received
A01-26-B-5-2.5	1		1105														Hold Not received
A01-26-B-6-1.5	38-37		1130										X				

100 B2 BV

8/6/19

Notes AL

Friedman & Bryce, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: <u>[Signature]</u>	PRINT NAME <u>Betsy Wing</u>	COMPANY <u>EP1</u>	DATE <u>7/9/19</u>	TIME <u>0418</u>
Relinquished by: <u>[Signature]</u>	PRINT NAME <u>Michelle Allen</u>	COMPANY <u>T.B.M.</u>	DATE <u>7/9/19</u>	TIME <u>0418</u>
Received by:				

907125

SAMPLE CHAIN OF CUSTODY

ME 07-07-19

Page # 5 of 9

9A03

Report To Thom Morin, Betzy WingCompany EPIAddress 1180 NW Maple St. Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email thom@epi-wa.com
betzy@epi-wa.com

PROJECT NAME <u>Brockdale</u>		PO # <u>74001.1</u>
REMARKS 		INVOICE TO <u>EPI</u>

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH 10 day TAT Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Archive Samples <input type="checkbox"/> Other
---	---

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM method 8081 Picidin method 8081 (Full Suite)	
A01-26-B-6:25	38	7/8/19	1135	Soil	1								Hold
A01-26-B-7:15	39 39		1132		1							X	Hold
A01-26-B-7:25	40		1137		1								Hold
A01-26-B-8:1	41 41		1135		1							X	Hold
A01-26-B-8:2	42 42		1140		1							X	Hold
A01-26-B-9:1	43		1142		1							X	Hold
A01-26-B-9:2	44		1145		1								Hold
A01-26-B-10:1	45		1148		1							X	Hold
A01-26-B-10:2	46		1150		1								Hold
A01-26-B-11:1	47		1152		1							X	

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029

Ph. (206) 285-8282

Received by: <u>[Signature]</u>	SIGNATURE	PRINT NAME <u>Betzy Wing</u>	COMPANY <u>EPI</u>	DATE <u>7/9/19</u>	TIME <u>0615</u>
Relinquished by: <u>[Signature]</u>	SIGNATURE	PRINT NAME <u>Michael Ezzell</u>	COMPANY <u>EPI</u>	DATE <u>7/9/19</u>	TIME <u>0615</u>

907125

SAMPLE CHAIN OF CUSTODY

ME 07-09-19

Page # 12 of 9 A03

Report To Thom Morin, Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0000 Email betsy.wing@epi-wa.com
thom.morin@epi-wa.com

SAMPLERS (signature) <u>Betsy Wing</u>	
PROJECT NAME	PO #
<u>Brookdale</u>	<u>74061.1</u>
REMARKS	INVOICE TO
	<u>EP1</u>

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround	<input type="checkbox"/> RUSH 10 day 14T
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	<input type="checkbox"/> Archive Samples
<input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081 (pilot run)	method 8081 (Full Suite)		
A01-26-B-11:2	48	7/8/19	1155	Soil	1								X			Hold
A01-26-B-12:1.5	49		1154		1											Hold
A01-26-B-12:2.5	50		1156		1											
A01-27-SW-1:1	51		1235		1								X			
A01-27-SW-2:0.5	52		1242		1								X			
A01-27-SW-3:0.5	53		1248		1								X			
A01-27-SW-4:1	54		1254		1									X		
A01-27-SW-6:0.8	55		1300		1								X			
A01-27-SW-5:0.7	56		1306		1								X			
A01-27-SW-8:0.5	57		1312		1								X			

Friedman & Bryce, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
<u>Betsy Wing</u>		<u>Betsy Wing</u>		<u>EP1</u>		<u>7/9/19</u>		<u>0612</u>	
Received by:		Received by:		Received by:		Received by:		Received by:	
<u>[Signature]</u>		<u>Michael</u>		<u>FIR</u>		<u>+</u>		<u>+</u>	
Relinquished by:		Relinquished by:		Relinquished by:		Relinquished by:		Relinquished by:	
Received by:		Received by:		Received by:		Received by:		Received by:	

907125

SAMPLE CHAIN OF CUSTODY

ME 07-09-19

Page # 7 of 9

Report To: Thom Moran, Betsy Wing

Company: EP1

Address: 1180 NW Maple St, Ste 310

City, State, ZIP: Issaquah, WA 98027

Phone: (425) 395-1010 Email: thom.moran@ep1-wa.com

PROJECT NAME: Brookdale

PO #

REMARKS

74001.1

INVOICE TO

Idvjo USA

TURNAROUND TIME
☐ Standard Turnaround
☐ RUSH 10 day TAT
 Rush charges authorized by:

SAMPLE DISPOSAL
☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-27-SW-7:0.6	58	7/8/19	1303	Soil	1							X	
A01-27-B-1:1.5	59		1258		1							X	
A01-27-B-1:2.5	60		1302		1								HOLD
A01-27-B-2:2	61		1308		1							X	
A01-27-B-2:3	62		1311		1								HOLD
A01-27-B-3:1.5	63		1316		1							X	
A01-27-B-3:2.5	64		1321		1								HOLD
A01-27-SW-9:1	65		1321		1							X	
A01-27-B-4:1.5	66		1326		1							X	
A01-27-B-4:2.5	67		1329		1								HOLD

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Betsy Wing

EP1

7/9/19

0618

Received by:

Michele

FIR

↓

↓

Friedman & Bryna, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029

Ph. (206) 285-8282

SAMPLE CHAIN OF CUSTODY

ME 07-09-19 8 of 9 A03

907125

Report To Thom Marin, Betsy Wing

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0000 Email thommar@epi-wa.com
betsy.wing@epi-wa.com

SAMPLE ID: <u>907125</u> PROJECT NAME: <u>Brookdale</u> REMARKS: <u>14110 USA</u>		PO # <u>74001-1</u> INVOICE TO <u>14110 USA</u>
TURNAROUND TIME: <u>7/9/19</u> Rush charges authorized by: <u>7/4/19</u>		
SAMPLE DISPOSAL: <input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH ID day <u>7/4/19</u> <input type="checkbox"/> Archive Samples <input type="checkbox"/> Other		

						ANALYSES REQUESTED										
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 (Dieldrin)	Method 8081 (Full Suite)	Notes	
AO1-27-SW-10:	68	7/8/14	1331	Soil	1								X			
AO1-27-SW-11: 0.8 ¹²	69		1333		1								X			
AO1-27-SW-12: 1	70		1340		1								X			
AO1-27-B-5: 1.5	71		1341		1								X			
AO1-27-B-5: 2.5	72		1344		1										HOLD	
AO1-27-SW-13: 0.6	73		1342		1								X			
AO1-27-SW-14: 0.6	74		1350		1								X			
AO1-27-SW-15: 0.6	75		1353		1								X			
AO1-27-B-6: 1.5	76		1400		1								X			
AO1-27-B-6: 2.5	77		1403		1										HOLD	

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029

Ph. (206) 285-8282

Received by: <u>Betsy Wing</u> Relinquished by: <u>Michael E. LLI</u>	SIGNATURE PRINT NAME COMPANY DATE TIME
Received by: <u>Betsy Wing</u> Relinquished by: <u>Michael E. LLI</u>	SIGNATURE PRINT NAME COMPANY DATE TIME

SAMPLE CHAIN OF CUSTODY

9703

PROJECT NAME	
SAMPLETERS (signature)	

PO#

PROJECT NAME	PO #
Brookdale	74001.1

REMARKS

INVOICE TO

REMARKS	INVOICE TO
	idcjo USA

TURNAROUND TIME
☐ Standard Turnaround
☒ RUSH 10 day TA T
 Rush charges authorized by: _____

SAMPLE DISPOSAL
☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

TURNAROUND TIME
Standard Turnaround
SH 10 day 7A7
charges authorized by:
SAMPLE DISPOSAL

☒ Archive Samples
☐ Other _____[illegible]

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

PRINT NAME

COMPANY

DATE _____

TIME

Reprinted by:

Reimursed by: 20121213
Received by: 20121213

Betsy Wing

40

7/21/95

0619

Relinquished by:

Received by:

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 31, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 907125

Dear Mr Morin:

Included are the additional results from the testing of material submitted on July 9, 2019 from the Brookdale 74001.1, F&BI 907125 project. There are 12 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0731R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 9, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 907125 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907125 -01	AOI-12-B-7:3
907125 -02	AOI-12-B-7:4
907125 -03	AOI-12-B-8:2
907125 -04	AOI-12-B-8:3
907125 -05	AOI-12-B-9:1.2
907125 -06	AOI-12-B-9:2.2
907125 -07	AOI-12-B-10:1.2
907125 -08	AOI-12-B-10:2.2
907125 -09	AOI-12-B-11:1.5
907125 -10	AOI-12-B-11:2.5
907125 -11	AOI-12-B-12:1.0
907125 -12	AOI-12-B-12:2.0
907125 -13	AOI-12-B-13:1.5
907125 -14	AOI-12-B-13:2.5
907125 -15	AOI-12-B-14:0.5
907125 -16	AOI-12-B-14:1.5
907125 -17	AOI-26-SW-1:0.5
907125 -18	AOI-26-SW-2:0.5
907125 -19	AOI-26-SW-3:0.5
907125 -20	AOI-26-SW-4:0.5
907125 -21	DUP-55
907125 -22	AOI-26-SW-5:0.5
907125 -23	AOI-26-SW-6:0.5
907125 -24	AOI-26-SW-7:0.5
907125 -25	AOI-26-B-2:1
907125 -26	AOI-26-B-2:2
907125 -27	AOI-26-B-1:1
907125 -28	AOI-26-B-1:2
907125 -29	AOI-26-B-5:1.5
907125 -30	AOI-26-B-5:2.5
907125 -31	AOI-26-B-4:1
907125 -32	AOI-26-B-4:2
907125 -33	AOI-26-B-3:1
907125 -34	AOI-26-B-3:2
907125 -35	DUP-56
907125 -36	DUP-57

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907125 -37	AOI-26-B-6:1.5
907125 -38	AOI-26-B-6:2.5
907125 -39	AOI-26-B-7:1.5
907125 -40	AOI-26-B-7:2.5
907125 -41	AOI-26-B-8:1
907125 -42	AOI-26-B-8:2
907125 -43	AOI-26-B-9:1
907125 -44	AOI-26-B-9:2
907125 -45	AOI-26-B-10:1
907125 -46	AOI-26-B-10:2
907125 -47	AOI-26-B-11:1
907125 -48	AOI-26-B-11:2
907125 -49	AOI-26-B-12:1.5
907125 -50	AOI-26-B-12:2.5
907125 -51	AOI-27-SW-1:1
907125 -52	AOI-27-SW-2:0.5
907125 -53	AOI-27-SW-3:0.5
907125 -54	AOI-27-SW-4:1
907125 -55	AOI-27-SW-6:0.8
907125 -56	AOI-27-SW-5:0.7
907125 -57	AOI-27-SW-8:0.5
907125 -58	AOI-27-SW-7:0.6
907125 -59	AOI-27-B-1:1.5
907125 -60	AOI-27-B-1:2.5
907125 -61	AOI-27-B-2:2
907125 -62	AOI-27-B-2:3
907125 -63	AOI-27-B-3:1.5
907125 -64	AOI-27-B-3:2.5
907125 -65	AOI-27-SW-9:1
907125 -66	AOI-27-B-4:1.5
907125 -67	AOI-27-B-4:2.5
907125 -68	AOI-27-SW-10:1.2
907125 -69	AOI-27-SW-11:0.8
907125 -70	AOI-27-SW-12:1
907125 -71	AOI-27-B-5:1.5
907125 -72	AOI-27-B-5:2.5
907125 -73	AOI-27-SW-13:0.6
907125 -74	AOI-27-SW-14:0.6
907125 -75	AOI-27-SW-15:0.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907125 -76	AOI-27-B-6:1.5
907125 -77	AOI-27-B-6:2.5
907125 -78	DUP-58
907125 -79	DUP-59
907125 -80	DUP-60
907125 -81	DUP-61
907125 -82	DUP-54

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-4:2	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/22/19	Lab ID:	907125-32 1/6
Date Analyzed:	07/23/19	Data File:	072318.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.028

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-56	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/22/19	Lab ID:	907125-35 1/6
Date Analyzed:	07/23/19	Data File:	072321.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-7:2.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/22/19	Lab ID:	907125-40 1/6
Date Analyzed:	07/23/19	Data File:	072322.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-10:2	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/22/19	Lab ID:	907125-46 1/6
Date Analyzed:	07/23/19	Data File:	072323.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-12:2.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/22/19	Lab ID:	907125-50 1/6
Date Analyzed:	07/23/19	Data File:	072324.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-1:2.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/22/19	Lab ID:	907125-60 1/6
Date Analyzed:	07/23/19	Data File:	072325.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/22/19	Lab ID:	09-1756 mb 1/6
Date Analyzed:	07/23/19	Data File:	072312.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	90	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/31/19

Date Received: 07/09/19

Project: Brookdale 74001.1, F&BI 907125

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907125-32 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.027	85 b	61 b	45-130	33 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	97	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

907125

SAMPLE CHAIN OF CUSTODY

ME 07-09-19

Page # 1 of 9

903

Report To Thom Morin, Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0000 Email thom@epi-wa.com
betsy@epi-wa.com

SAMPLES (signature) <u>Betsy Wing</u> PROJECT NAME <u>Brookdale</u>		PO # <u>74001.1</u>
REMARKS <u>Brookdale</u>		INVOICE TO <u>Chijo USA</u>

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>10-Bay</u> Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other
--	--

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM Method 8081 Dieldrin only Method 8081 Full Suite	Notes
A01-12-B-7:3	01	7/8/19	0815	Soil	1							X	
A01-12-B-7:4	02		0820		1								HOLD
A01-12-B-8:2	03		0830		1							X	
A01-12-B-8:3	04		0835		1								HOLD
A01-12-B-9:1.2	05		0845		1							X	
A01-12-B-9:2.2	06		0850		1								HOLD
A01-12-B-10:1.2	07		0855		1							X	
A01-12-B-10:2.2	08		0900		1								HOLD
A01-12-B-11:1.5	09		0905		1							X	
A01-12-B-11:2.5	10	✓	0910	✓	1								HOLD

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: <u>Betsy Wing</u>	<u>Betsy Wing</u>	<u>EP1</u>	<u>7/9/19</u>	<u>0815</u>
Received by: <u>Michael Edell</u>	<u>Michael Edell</u>	<u>FIRINC</u>	<u>1</u>	<u>1</u>
Relinquished by:				
Received by:		<u>Samples received at</u>	<u>3</u>	<u>00</u>

907125

SAMPLE CHAIN OF CUSTODY

ME 07-07-19

2 of 9

903

Report To Thom Morin, Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425)395-0010 Email thom@epi-wa.com
betsy@epi-wa.com

SAMPLES (signature) <u>Betsy Wing</u>		PO #
PROJECT NAME <u>Brookdale</u>		<u>74001.1</u>
REMARKS	INVOICE TO <u>14130 USA</u>	

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround	<input type="checkbox"/> RUSH <u>10 day</u>
Rush charges authorized by: _____	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	<input checked="" type="checkbox"/> Archive Samples
<input type="checkbox"/> Other _____	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-12-B-12:1.0	11	7/8/19	0920	soil	1							X	
A01-12-B-12:2.0	12		0925										hold
A01-12-B-13:1.5	13		0930									X	
A01-12-B-13:2.5	14		0935										hold
A01-12-B-14:0.5	15		0940									X	
A01-12-B-14:1.5	16		0945										hold
A01-26-SW-1:0.5	17		1000									X	
A01-26-SW-2:0.5	18		1005									X	
A01-26-SW-3:0.5	19		1010									X	
A01-26-SW-4:0.5	20		1015									X	

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>Betsy Wing</u>		<u>Betsy Wing</u>		<u>EP1</u>		<u>7/9/19</u>		<u>0615</u>	
Received by: <u>Michelle Dalt</u>		<u>Michelle Dalt</u>		<u>F18m</u>		<u>7</u>		<u>1</u>	
Relinquished by:									
Received by:									

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

907125

SAMPLE CHAIN OF CUSTODY

ME 07-09-19

3

of

9103

Report To Thom Merrin, Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-8010 Email thomm@epi-wa.com
betsyw@epi-wa.comSAMPLES (signature)
Betsy Wing

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

EP1

TURNAROUND TIME

☐ Standard Turnaround
☐ RUSH 10 day

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

TPH-HCID
TPH-Diesel
TPH-Gasoline
BTEX by 8021B
VOCs by 8260C
SVOCs by 8270D
PAHs 8270D SIM
Method 8081
Field in
Method 8081
Full Suite

Notes

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 Field in	Method 8081 Full Suite	Notes
Dup - 55	21	7/8/19	—	Soil	1								X		
A01-26-SW-5:05	22		1020										X		
A01-26-SW-6:05	23		1025										X		
A01-26-SW-7:05	24		1030										X		
A01-26-B-1:1			1050												
A01-26-B-2:1	25		1040										X		
A01-26-B-2:2	26		1045												HOLD
A01-26-B-1:1	27		1050										X		
A01-26-B-1:2	28		1055										X		
A01-26-B-5:15	29		1100										X		

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by:

Betsy Wing

PRINT NAME

Betsy Wing

COMPANY

EP1

DATE

7/9/19

TIME

6:18

Received by:

Relinquished by:

Received by:

MichelleFilm

907125

SAMPLE CHAIN OF CUSTODY

ME 07-09-19 4 of 9

903

Report To Thomson Betsy Wing

Company EP1

Address 1180 NW Maple St. Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0910 Email thomson@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature) <u>Betsy Wing</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS	INVOICE TO <u>EP1</u>

TURNAROUND TIME Page # <u>4</u> of <u>9</u>
<input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH <u>10 day</u> <u>171</u> Rush charges authorized by: _____
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-26-B-5.2.5	30	7/8/19	1105	soil	1								HOLD
A01-26-B-4.1	31		1110		1							X	
A01-26-B-4.2	32		1115										HOLD
A01-26-B-3.1	33		1117									X	
A01-26-B-3.2	34		1118										HOLD
Dup-S6	35											X	
Dup-S7	36											X	
A01-26-B-5.1.5	MS4415		1100									X	Not received
A01-26-B-5.2.5	1		1105										Hold Not received
A01-26-B-6.1.5	38-37		1130									X	

SIGNATURE		PRINT NAME		COMPANY	DATE	TIME
Relinquished by: <u>Betsy Wing</u>		<u>Betsy Wing</u>				
Received by: <u>Michael E. Allen</u>		<u>Michael E. Allen</u>		EP1	7/9/19	0618
Relinquished by:				T&B	1	1
Received by:						

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

907125

SAMPLE CHAIN OF CUSTODY

ME 07-09-19

5 of 903

Report To Thom Morin, Betsy Wing

Company EP1

Address 1180 NW Maple St. Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email thom@epi-wa.com
betsey@epi-wa.com

SAMPLE PREP (Signature) <u>Betsy Wing</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS	INVOICE TO <u>EP1</u>

TURNDOWN TIME Page # <u>5</u> of <u>903</u>	
<input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH <u>10 day</u> TAT Rush charges authorized by:	
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Archive Samples <input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM method 8081 field in method 8081 (Full Suite)	
A01-26-B-6:25	38	7/8/19	1135	Soil	1								Hold
A01-26-B-7:15	38 39		1132		1							X	
A01-26-B-7:25	40		1127		1								Hold
A01-26-B-8:1	40 41		1135		1							X	
A01-26-B-8:2	41 42		1140		1								Hold
A01-26-B-9:1	43		1142		1							X	
A01-26-B-9:2	44		1145		1								Hold
A01-26-B-10:1	45		1148		1							X	
A01-26-B-10:2	46		1150		1								Hold
A01-26-B-11:1	47		1152		1							X	

SIGNATURE		PRINT NAME		COMPANY	DATE	TIME
Received by: <u>Betsy Wing</u>		Betsy Wing				
Relinquished by: <u>Michele</u>		Michele		EP1	7/9/19	6:16
Received by:						

Friedman & Bryga, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SAMPLE CHAIN OF CUSTODY

Page # 6 of 10

Company #81

City, State, ZIP Issaquah, WA 98027

Phone (425) 345-0000 Email help@epi-wa.com

petzlin@epi-wa.com
thomh@epi-wa.com

PO #

74061.1

INVOICE TO

TURNAROUND TIME	<input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH <u>10 day 14 T</u> Rush charges authorized by: _____
SAMPLE DISPOSAL	<input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____

SAMPLE DISPOSAL

☐ Dispose after 30 days

☐ Archive Samples

☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM method 8081 (Prelim) method 8081 (Full Suite)	
A01-26-B-11;2	48	7/8/19	1155	Soil	1							X	Hold
A01-26-B-12;1.5	49		1154		1							X	Hold
A01-26-B-12;2.5	50		1156		1								
A01-27-SW-1;1	51		1235		1							X	
A01-27-SW-2;0.5	52		1242		1							X	
A01-27-SW-3;0.5	53		1248		1							X	
A01-27-SW-4;1	54		1254		1							X	
A01-27-SW-6;0.8	55		1300		1							X	
A01-27-SW-5;0.7	56		1300		1							X	
A01-27-SW-8;0.5	57	✓	1312	✓	1							X	

PRINT NAME

COMPANY

DATE _____

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

907125

SAMPLE CHAIN OF CUSTODY

ME 07-09-19

Page # 7 of 9

Report To Thom Moya, Betsy Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email thommoya@epi-wa.com
betsyw@epi-wa.com

SAFETY (signature) <u>Betsy Wing</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS	INVOICE TO <u>Tenjo USA</u>

TURNAROUND TIME Page # 7 of 9	
<input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH 10 day TAT Rush charges authorized by: _____	
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____	

						ANALYSES REQUESTED										Notes
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 808) (Dieldrin)	method 808) (Full Suite)		
A01-27-SW-7:0.6	58	7/8/19	1303	Soil	1								X			
A01-27-B-1:1.5	59	↓	1258	↓	1								X			
A01-27-B-1:2.5	60		1302	↓	1											HOLD
A01-27-B-2:2	61		1308	↓	1									X		
A01-27-B-2:3	62		1311	↓	1											HOLD
A01-27-B-3:1.5	63		1316	↓	1									X		
A01-27-B-3:2.5	64	1321	↓	↓	1										HOLD	
A01-27-SW-9:1	65		1321	↓	1								X			
A01-27-B-4:1.5	66		1326	↓	1									X		
A01-27-B-4:2.5	67	↓	1329	↓	1										HOLD	

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by:	<u>Betsy Wing</u>		<u>Betsy Wing</u>		<u>EP1</u>	7/9/19	0616
Received by:	<u>M. E. L. I. D.</u>		<u>M. E. L. I. D.</u>		<u>FIB</u>		
Relinquished by:							
Received by:							

Friedman & Bryva, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SAMPLE CHAIN OF CUSTODY

907125

ME 07-09-19

8 of 9 pgs

Report To Thom Marin, Betsy Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 385-0000 Email thommar@epi-wa.com
betsy.wing@epi-wa.com

SAMPLERS (signature) <u>Betsy Wing</u>		PO #
PROJECT NAME <u>Brookdale</u>		74001.1
REMARKS	INVOICE TO <u>Ichijo USA</u>	

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH 10 day 741 Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Archive Samples <input type="checkbox"/> Other
--	---

						ANALYSES REQUESTED										
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 (Dieldrin)	Method 8081 (Full Suite)	Notes	
AO1-27-SW-10:1.2	68	7/8/14	1331	Soil	1								X			
AO1-27-SW-11:0.8 ^{1.2}	69		1333		1								X			
AO1-27-SW-12:1	70		1340		1								X			
AO1-27-B-5:1.5	71		1341		1								X			
AO1-27-B-5:2.5	72		1344		1											HOLD
AO1-27-SW-13:6.6	73		1342		1								X			
AO1-27-SW-14:0.6	74		1350		1								X			
AO1-27-SW-15:0.6	75		1353		1								X			
AO1-27-B-6:1.5	76		1460		1								X			
AO1-27-B-6:2.5	77		1403		1											HOLD

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <u>Betsy Wing</u>		Betsy Wing		EP1		7/9/14	613
Received by: <u>Michael E. Lili</u>		Michael E. Lili		F-161			
Relinquished by:							
Received by:							

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 19, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 907125

Dear Mr Morin:

Included are the results from the testing of material submitted on July 9, 2019 from the Brookdale 74001.1, F&BI 907125 project. There are 71 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0719R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 9, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 907125 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907125 -01	AOI-12-B-7:3
907125 -02	AOI-12-B-7:4
907125 -03	AOI-12-B-8:2
907125 -04	AOI-12-B-8:3
907125 -05	AOI-12-B-9:1.2
907125 -06	AOI-12-B-9:2.2
907125 -07	AOI-12-B-10:1.2
907125 -08	AOI-12-B-10:2.2
907125 -09	AOI-12-B-11:1.5
907125 -10	AOI-12-B-11:2.5
907125 -11	AOI-12-B-12:1.0
907125 -12	AOI-12-B-12:2.0
907125 -13	AOI-12-B-13:1.5
907125 -14	AOI-12-B-13:2.5
907125 -15	AOI-12-B-14:0.5
907125 -16	AOI-12-B-14:1.5
907125 -17	AOI-26-SW-1:0.5
907125 -18	AOI-26-SW-2:0.5
907125 -19	AOI-26-SW-3:0.5
907125 -20	AOI-26-SW-4:0.5
907125 -21	DUP-55
907125 -22	AOI-26-SW-5:0.5
907125 -23	AOI-26-SW-6:0.5
907125 -24	AOI-26-SW-7:0.5
907125 -25	AOI-26-B-2:1
907125 -26	AOI-26-B-2:2
907125 -27	AOI-26-B-1:1
907125 -28	AOI-26-B-1:2
907125 -29	AOI-26-B-5:1.5
907125 -30	AOI-26-B-5:2.5
907125 -31	AOI-26-B-4:1
907125 -32	AOI-26-B-4:2
907125 -33	AOI-26-B-3:1
907125 -34	AOI-26-B-3:2
907125 -35	DUP-56
907125 -36	DUP-57

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (DRAFT)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907125 -37	AOI-26-B-6:1.5
907125 -38	AOI-26-B-6:2.5
907125 -39	AOI-26-B-7:1.5
907125 -40	AOI-26-B-7:2.5
907125 -41	AOI-26-B-8:1
907125 -42	AOI-26-B-8:2
907125 -43	AOI-26-B-9:1
907125 -44	AOI-26-B-9:2
907125 -45	AOI-26-B-10:1
907125 -46	AOI-26-B-10:2
907125 -47	AOI-26-B-11:1
907125 -48	AOI-26-B-11:2
907125 -49	AOI-26-B-12:1.5
907125 -50	AOI-26-B-12:2.5
907125 -51	AOI-27-SW-1:1
907125 -52	AOI-27-SW-2:0.5
907125 -53	AOI-27-SW-3:0.5
907125 -54	AOI-27-SW-4:1
907125 -55	AOI-27-SW-6:0.8
907125 -56	AOI-27-SW-5:0.7
907125 -57	AOI-27-SW-8:0.5
907125 -58	AOI-27-SW-7:0.6
907125 -59	AOI-27-B-1:1.5
907125 -60	AOI-27-B-1:2.5
907125 -61	AOI-27-B-2:2
907125 -62	AOI-27-B-2:3
907125 -63	AOI-27-B-3:1.5
907125 -64	AOI-27-B-3:2.5
907125 -65	AOI-27-SW-9:1
907125 -66	AOI-27-B-4:1.5
907125 -67	AOI-27-B-4:2.5
907125 -68	AOI-27-SW-10:1.2
907125 -69	AOI-27-SW-11:0.8
907125 -70	AOI-27-SW-12:1
907125 -71	AOI-27-B-5:1.5
907125 -72	AOI-27-B-5:2.5
907125 -73	AOI-27-SW-13:0.6
907125 -74	AOI-27-SW-14:0.6
907125 -75	AOI-27-SW-15:0.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (DRAFT)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907125 -76	AOI-27-B-6:1.5
907125 -77	AOI-27-B-6:2.5
907125 -78	DUP-58
907125 -79	DUP-59
907125 -80	DUP-60
907125 -81	DUP-61
907125 -82	DUP-54

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-B-7:3	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	907125-01 1/6
Date Analyzed:	07/11/19	Data File:	071114.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-B-8:2	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/09/19	Lab ID:	907125-03 1/6
Date Analyzed:	07/12/19	Data File:	071161.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-B-9:1.2	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/09/19	Lab ID:	907125-05 1/6
Date Analyzed:	07/12/19	Data File:	071240.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-B-10:1.2	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/09/19	Lab ID:	907125-07 1/6
Date Analyzed:	07/12/19	Data File:	071241.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-B-11:1.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/09/19	Lab ID:	907125-09 1/6
Date Analyzed:	07/12/19	Data File:	071242.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-B-12:1.0	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/09/19	Lab ID:	907125-11 1/6
Date Analyzed:	07/12/19	Data File:	071243.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-B-13:1.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/09/19	Lab ID:	907125-13 1/6
Date Analyzed:	07/12/19	Data File:	071244.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-B-14:0.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	907125-15 1/6
Date Analyzed:	07/11/19	Data File:	071119.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-1:0.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/09/19	Lab ID:	907125-17 1/6
Date Analyzed:	07/12/19	Data File:	071246.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-2:0.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/09/19	Lab ID:	907125-18 1/6
Date Analyzed:	07/12/19	Data File:	071247.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	73	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.097

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-3:0.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-19 1/6
Date Analyzed:	07/12/19	Data File:	071227.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.18

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-4:0.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-20 1/6
Date Analyzed:	07/12/19	Data File:	071248.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.048

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-55	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-21 1/6
Date Analyzed:	07/12/19	Data File:	071249.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.057

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-5:0.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-22 1/6
Date Analyzed:	07/12/19	Data File:	071250.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.21

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-6:0.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-23 1/6
Date Analyzed:	07/13/19	Data File:	071251.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	57	50	150
DBC	69	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-7:0.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-24 1/6
Date Analyzed:	07/13/19	Data File:	071252.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-2:1	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-25 1/6
Date Analyzed:	07/13/19	Data File:	071253.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-1:1	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-27 1/6
Date Analyzed:	07/13/19	Data File:	071254.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-1:2	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-28 1/6
Date Analyzed:	07/13/19	Data File:	071255.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-5:1.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-29 1/6
Date Analyzed:	07/13/19	Data File:	071256.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.031

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-4:1	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-31 1/6
Date Analyzed:	07/13/19	Data File:	071257.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.27

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-3:1	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	907125-33 1/60
Date Analyzed:	07/15/19	Data File:	071506.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78 d	50	150
DBC	87 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-56	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-35 1/6
Date Analyzed:	07/13/19	Data File:	071259.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-57	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-36 1/6
Date Analyzed:	07/13/19	Data File:	071260.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	54	50	150
DBC	68	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.024

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-6:1.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-37 1/6
Date Analyzed:	07/13/19	Data File:	071261.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.016

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-7:1.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	907125-39 1/6
Date Analyzed:	07/11/19	Data File:	071120.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.069
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.18
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-8:1	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-41 1/6
Date Analyzed:	07/13/19	Data File:	071262.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-9:1	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-43 1/6
Date Analyzed:	07/13/19	Data File:	071326.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.022

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-10:1	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	907125-45 1/60
Date Analyzed:	07/15/19	Data File:	071507.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74 d	50	150
DBC	81 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-11:1	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	907125-47 1/6
Date Analyzed:	07/13/19	Data File:	071328.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	73	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-12:1.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-49 1/6
Date Analyzed:	07/13/19	Data File:	071329.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.066

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-1:1	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-51 1/6
Date Analyzed:	07/12/19	Data File:	071230.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-2:0.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-52 1/6
Date Analyzed:	07/13/19	Data File:	071330.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-3:0.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-53 1/6
Date Analyzed:	07/13/19	Data File:	071331.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-4:1	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	907125-54 1/6
Date Analyzed:	07/11/19	Data File:	071121.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.36
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-6:0.8	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-55 1/6
Date Analyzed:	07/13/19	Data File:	071332.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	59	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-5:0.7	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-56 1/6
Date Analyzed:	07/13/19	Data File:	071333.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.48

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-8:0.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-57 1/6
Date Analyzed:	07/13/19	Data File:	071334.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-7:0.6	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-58 1/6
Date Analyzed:	07/13/19	Data File:	071335.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-1:1.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-59 1/6
Date Analyzed:	07/13/19	Data File:	071336.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	73	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.065

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-2:2	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	907125-61 1/6
Date Analyzed:	07/13/19	Data File:	071337.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.026

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-3:1.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	907125-63 1/6
Date Analyzed:	07/15/19	Data File:	071512.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.032

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-9:1	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	907125-65 1/6
Date Analyzed:	07/16/19	Data File:	071610.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.023

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-4:1.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	907125-66 1/6
Date Analyzed:	07/11/19	Data File:	071122.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.013
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-10:1.2	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	907125-68 1/6
Date Analyzed:	07/16/19	Data File:	071611.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.013

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-11:0.8	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	907125-69 1/6
Date Analyzed:	07/16/19	Data File:	071612.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.010

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-12:1	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	907125-70 1/6
Date Analyzed:	07/16/19	Data File:	071613.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.066

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-5:1.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	907125-71 1/6
Date Analyzed:	07/16/19	Data File:	071614.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-13:0.6	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	907125-73 1/6
Date Analyzed:	07/16/19	Data File:	071615.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-14:0.6	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	907125-74 1/6
Date Analyzed:	07/16/19	Data File:	071616.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-15:0.6	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	907125-75 1/6
Date Analyzed:	07/15/19	Data File:	071531.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.011

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-6:1.5	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	907125-76 1/6
Date Analyzed:	07/15/19	Data File:	071532.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-59	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	907125-79 1/6
Date Analyzed:	07/15/19	Data File:	071533.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-60	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	907125-80 1/6
Date Analyzed:	07/15/19	Data File:	071534.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-61	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	907125-81 1/6
Date Analyzed:	07/15/19	Data File:	071535.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.033

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-54	Client:	Environmental Partners
Date Received:	07/09/19	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	907125-82 1/6
Date Analyzed:	07/15/19	Data File:	071536.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.011

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/09/19	Lab ID:	09-1640 mb 1/6
Date Analyzed:	07/11/19	Data File:	071145.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	09-1644 mb 1/6
Date Analyzed:	07/12/19	Data File:	071223.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	09-1645 mb 1/6
Date Analyzed:	07/12/19	Data File:	071222.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/11/19	Lab ID:	09-1652 mb 1/6
Date Analyzed:	07/12/19	Data File:	071220.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907125
Date Extracted:	07/10/19	Lab ID:	09-1643 mb 1/6
Date Analyzed:	07/11/19	Data File:	071111.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	111	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/19/19

Date Received: 07/09/19

Project: Brookdale 74001.1, F&BI 907125

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907087-29 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.049	80 b	75 b	45-130	6 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	99	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/19/19

Date Received: 07/09/19

Project: Brookdale 74001.1, F&BI 907125

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907125-19 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.16	41 b	72 b	45-130	55 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	87	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/19/19

Date Received: 07/09/19

Project: Brookdale 74001.1, F&BI 907125

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907125-51 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	76	76	45-130	0

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	88	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/19/19

Date Received: 07/09/19

Project: Brookdale 74001.1, F&BI 907125

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907148-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	71	73	45-130	3

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	91	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/19/19

Date Received: 07/09/19

Project: Brookdale 74001.1, F&BI 907125

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR ORGANOCHLORINE PESTICIDES BY EPA METHOD 8081B

Laboratory Code: 907125-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	<0.01	82	88	45-111	7
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	<0.01	89	93	50-117	4
beta-BHC	mg/kg (ppm)	0.1	<0.01	87	92	49-109	6
delta-BHC	mg/kg (ppm)	0.1	<0.01	90	93	39-114	3
Heptachlor	mg/kg (ppm)	0.1	<0.01	105	112	40-131	6
Aldrin	mg/kg (ppm)	0.1	<0.01	88	93	44-121	6
Heptachlor Epoxide	mg/kg (ppm)	0.1	<0.01	91	95	46-122	4
trans-Chlordane	mg/kg (ppm)	0.1	<0.01	90	94	41-129	4
cis-Chlordane	mg/kg (ppm)	0.1	<0.01	93	96	44-120	3
4,4'-DDE	mg/kg (ppm)	0.1	<0.01	84	87	50-150	4
Endosulfan I	mg/kg (ppm)	0.1	<0.01	87	91	45-124	4
Dieldrin	mg/kg (ppm)	0.1	<0.01	91	95	45-130	4
Endrin	mg/kg (ppm)	0.1	<0.01	111	113	50-140	2
4,4'-DDD	mg/kg (ppm)	0.1	<0.01	105	108	26-155	3
Endosulfan II	mg/kg (ppm)	0.1	<0.01	85	88	40-135	3
4,4'-DDT	mg/kg (ppm)	0.1	<0.01	102	104	50-150	2
Endrin Aldehyde	mg/kg (ppm)	0.1	<0.01	86	90	35-139	5
Methoxychlor	mg/kg (ppm)	0.1	<0.01	109	121	28-162	10
Endosulfan Sulfate	mg/kg (ppm)	0.1	<0.01	94	96	40-141	2
Endrin Ketone	mg/kg (ppm)	0.1	<0.01	99	102	41-147	3
Toxaphene	mg/kg (ppm)	4	<1	73	77	50-150	5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/19/19

Date Received: 07/09/19

Project: Brookdale 74001.1, F&BI 907125

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
alpha-BHC	mg/kg (ppm)	0.1	94	56-113
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	97	58-120
beta-BHC	mg/kg (ppm)	0.1	89	70-130
delta-BHC	mg/kg (ppm)	0.1	91	70-130
Heptachlor	mg/kg (ppm)	0.1	95	56-124
Aldrin	mg/kg (ppm)	0.1	112	70-130
Heptachlor Epoxide	mg/kg (ppm)	0.1	106	70-130
trans-Chlordane	mg/kg (ppm)	0.1	89	60-123
cis-Chlordane	mg/kg (ppm)	0.1	103	70-130
4,4'-DDE	mg/kg (ppm)	0.1	92	70-130
Endosulfan I	mg/kg (ppm)	0.1	119	62-124
Dieldrin	mg/kg (ppm)	0.1	97	70-130
Endrin	mg/kg (ppm)	0.1	100	56-147
4,4'-DDD	mg/kg (ppm)	0.1	94	54-137
Endosulfan II	mg/kg (ppm)	0.1	97	42-140
4,4'-DDT	mg/kg (ppm)	0.1	89	25-169
Endrin Aldehyde	mg/kg (ppm)	0.1	91	21-135
Methoxychlor	mg/kg (ppm)	0.1	95	54-154
Endosulfan Sulfate	mg/kg (ppm)	0.1	112	39-148
Endrin Ketone	mg/kg (ppm)	0.1	106	46-134
Toxaphene	mg/kg (ppm)	4	103	56-145

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

907125

SAMPLE CHAIN OF CUSTODY

ME 07-09-19

1 of 9

Report To Thom Morin, Betsy Wing
 Company EP1
 Address 1180 NW Maple St, Ste 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-0000 Email thom@epi-wa.com
betsey@epi-wa.com

SAMPLES (signature) <u>Betsy Wing</u> PROJECT NAME <u>Brookdale</u>		PO # <u>74001.1</u>
REMARKS <u>Brookdale</u>		INVOICE TO <u>Chijo USA</u>

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>10-day</u> Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other
--	--

						ANALYSES REQUESTED										Notes
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 Dielsdin only method 8081 Full suite			
A01-12-B-7:3	01	7/8/19	0815	Soil	1								X			
A01-12-B-7:4	02		0820		1									HOLD		
A01-12-B-8:2	03		0830		1							X				
A01-12-B-8:3	04		0835		1									1 HOLD		
A01-12-B-9:1.2	05		0845		1							X				
A01-12-B-9:2.2	06		0850		1									1 HOLD		
A01-12-B-10:1.2	07		0855		1							X				
A01-12-B-10:2.2	08		0900		1									1 HOLD		
A01-12-B-11:1.5	09		0905		1							X				
A01-12-B-11:2.5	10	✓	0910	✓	1									1 HOLD		

Relinquished by: <u>Betsy Wing</u> Received by: <u>Michael Edell</u>		SIGNATURE PRINT NAME <u>Betsy Wing</u> <u>Michael Edell</u>		COMPANY <u>EP1</u> <u>FIRINC</u>	DATE <u>7/9/19</u> <u>7/9/19</u>	TIME <u>6:15</u> <u>1</u>
Relinquished by: <u>Betsy Wing</u> Received by: <u>Michael Edell</u>		SIGNATURE PRINT NAME <u>Betsy Wing</u> <u>Michael Edell</u>		COMPANY <u>EP1</u> <u>FIRINC</u>	DATE <u>7/9/19</u> <u>7/9/19</u>	TIME <u>6:15</u> <u>1</u>
Received by: <u>Betsy Wing</u>		Received by: <u>Michael Edell</u>		Samples received at <u>3</u>	<u>00</u>	

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

907125

SAMPLE CHAIN OF CUSTODY

ME 07-07-19

2 of 9

903

Report To Thom Morin, Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425)395-0010 Email thom@epi-wa.com
betsey@epi-wa.com

SAMPLES (signature) <u>Betsy Wing</u>		PO #
PROJECT NAME <u>Brookdale</u>		<u>74001.1</u>
REMARKS	INVOICE TO <u>14130 USA</u>	

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround	<input type="checkbox"/> RUSH <u>10 day</u>
Rush charges authorized by: _____	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	<input checked="" type="checkbox"/> Archive Samples
<input type="checkbox"/> Other _____	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-12-B-12:1.0	11	7/8/19	0920	soil	1							X	
A01-12-B-12:2.0	12		0925										hold
A01-12-B-13:1.5	13		0930									X	
A01-12-B-13:2.5	14		0935										hold
A01-12-B-14:0.5	15		0940									X	
A01-12-B-14:1.5	16		0945										hold
A01-26-SW-1:0.5	17		1000									X	
A01-26-SW-2:0.5	18		1005									X	
A01-26-SW-3:0.5	19		1010									X	
A01-26-SW-4:0.5	20		1015									X	

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>Betsy Wing</u>		<u>Betsy Wing</u>		<u>EP1</u>		<u>7/9/19</u>		<u>0615</u>	
Received by: <u>Michelle Dalt</u>		<u>Michelle Dalt</u>		<u>F18m</u>		<u>7</u>		<u>1</u>	
Relinquished by:									
Received by:									

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

907125

SAMPLE CHAIN OF CUSTODY

ME 07-09-19

3

of

9103

Report To Thom Merrin, Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-8010 Email thomm@epi-wa.com
betsyw@epi-wa.comSAMPLES (signature)
Betsy Wing

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

EP1

TURNAROUND TIME

☐ Standard Turnaround
☐ RUSH 10 day

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 Field kit	Method 8081 Full Suite	Notes
Dup - 55	21	7/8/19	—	Soil	1								X		
A01-26-SW-5:05	22		1020										X		
A01-26-SW-6:05	23		1025										X		
A01-26-SW-7:05	24		1030										X		
A01-26-B-1:1			1050												
A01-26-B-2:1	25		1040										X		
A01-26-B-2:2	26		1045												HOLD
A01-26-B-1:1	27		1050										X		
A01-26-B-1:2	28		1055										X		
A01-26-B-5:15	29		1100										X		

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by:

Betsy Wing

PRINT NAME

Betsy Wing

COMPANY

EP1

DATE

7/9/19

TIME

6:18

Received by:

Relinquished by:

Received by:

MichelleFibers

907125

SAMPLE CHAIN OF CUSTODY

ME 07-09-19 4 of 9

P03

Report To Thomson Betsy Wing

Company EP1

Address 1180 NW Maple St. Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0910 Email thomson@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature) <u>Betsy Wing</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS	INVOICE TO <u>EP1</u>

TURNAROUND TIME Page # <u>4</u> of <u>9</u>
<input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH <u>10 day</u> <u>171</u> Rush charges authorized by: _____
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-26-B-5.2.5	30	7/8/19	1105	soil	1								HOLD
A01-26-B-4.1	31		1110		1							X	
A01-26-B-4.2	32		1115										HOLD
A01-26-B-3.1	33		1117									X	
A01-26-B-3.2	34		1118										HOLD
Dup-S6	35											X	
Dup-S7	36											X	
A01-26-B-5.1.5	MS4415		1100									X	Not received
A01-26-B-5.2.5	1		1105										Hold Not received
A01-26-B-6.1.5	38-37		1130									X	

Relinquished by: <u>Betsy Wing</u>		SIGNATURE	
Received by: <u>Michael E. Allen</u>		PRINT NAME	
Relinquished by:		COMPANY	
Received by:		DATE	
		TIME	

907125

SAMPLE CHAIN OF CUSTODY

ME 07-09-19

5 of 903

Report To Thom Morin, Betsy Wing

Company EP1

Address 1180 NW Maple St. Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email thom@epi-wa.com
betsey@epi-wa.com

SAMPLE PREP (Signature) <u>Betsy Wing</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS	INVOICE TO <u>EP1</u>

TURNDOWN TIME Page # <u>5</u> of <u>903</u>	
<input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH 10 day TAT Rush charges authorized by:	
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Archive Samples <input type="checkbox"/> Other	

						ANALYSES REQUESTED							
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM method 8081 field in method 8081 (Full Suite)	Notes
A01-26-B-6:25	38	7/8/19	1135	Soil	1								Hold
A01-26-B-7:15	38 39		1132		1							X	Hold
A01-26-B-7:25	40		1137		1								Hold
A01-26-B-8:1	40 41		1135		1							X	Hold
A01-26-B-8:2	41 42		1140		1								Hold
A01-26-B-9:1	43		1142		1							X	Hold
A01-26-B-9:2	44		1145		1								Hold
A01-26-B-10:1	45		1148		1							X	Hold
A01-26-B-10:2	46		1150		1								Hold
A01-26-B-11:1	47	✓	1152	✓	1							X	

SIGNATURE		PRINT NAME		COMPANY	DATE	TIME
Received by: <u>Betsy Wing</u>		Betsy Wing				
Relinquished by: <u>Michele</u>		Michele		EP1	7/9/19	0616
Received by:						

Friedman & Bryga, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

907125

SAMPLE CHAIN OF CUSTODY

ME 07-09-19

Page # 6 of 9

9 A03

Report To Thom Morin, Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-6000 Email betsyw@epi-wa.com
thom@epi-wa.comSAMPLES (signature)
PROJECT NAME Betsy Wing

PROJECT NAME

PO #

Brookdale74001.1

REMARKS

INVOICE TO

EP1

TURNAROUND TIME

☐ Standard Turnaround
☐ RUSH 10 day 14T

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☐ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID

Lab ID

Date
SampledTime
SampledSample
Type# of
Jars

TPH-HCID

TPH-Diesel

TPH-Gasoline

BTEX by 8021B

VOCs by 8260C

SVOCs by 8270D

PAHs 8270D SIM

method 8081

(pieldin)

method 8081

(Full Suite)

Notes

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081 (pieldin)	method 8081 (Full Suite)	Notes
A01-26-B-11:2	48	7/8/19	1155	Soil	1										Hold
A01-26-B-12:1.5	49		1154		1										
A01-26-B-12:2.5	50		1156		1										Hold
A01-27-SW-1:1	51		1235		1										
A01-27-SW-2:0.5	52		1242		1										
A01-27-SW-3:0.5	53		1248		1										
A01-27-SW-4:1	54		1254		1										
A01-27-SW-6:0.8	55		1300		1										
A01-27-SW-5:0.7	56		1300		1										
A01-27-SW-8:0.5	57		1312		1										

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Relinquished by:

Received by:

Betsy Wing

EP1

7/9/19

0612

Relinquished by:

Received by:

Michael Kelly

FIRM

+

J

Ph. (206) 285-8282

907125

SAMPLE CHAIN OF CUSTODY

ME 07-09-19

Page # 7 of 9

Report To Thom Moya, Betsy Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email thom@epi-wa.com
betsy@epi-wa.com

SAFETY (signature) <u>Betsy Wing</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS	INVOICE TO <u>Tenjo USA</u>

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH 10 day TAT Rush charges authorized by: _____	
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____	

						ANALYSES REQUESTED										Notes
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 808) (Dieldrin)	method 808) (Full Suite)		
A01-27-SW-7:0.6	58	7/8/19	1303	Soil	1								X			
A01-27-B-1:1.5	59	↓	1258	↓	1								X			
A01-27-B-1:2.5	60		1302	↓	1											HOLD
A01-27-B-2:2	61		1308	↓	1									X		
A01-27-B-2:3	62		1311	↓	1											HOLD
A01-27-B-3:1.5	63		1316	↓	1									X		
A01-27-B-3:2.5	64	1321	↓	↓	1										HOLD	
A01-27-SW-9:1	65		1321	↓	1								X			
A01-27-B-4:1.5	66		1326	↓	1									X		
A01-27-B-4:2.5	67	↓	1329	↓	1										HOLD	

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <u>Betsy Wing</u>		<u>Betsy Wing</u>		<u>EP1</u>		7/9/19	0616
Received by: <u>M. E. L. 18</u>		<u>M. E. L. 18</u>		<u>FIB</u>			
Relinquished by:							
Received by:							

Friedman & Bryva, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SAMPLE CHAIN OF CUSTODY

907125

ME 07-09-19

8 of 9 pgs

Report To Thom Marin, Betsy Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 385-0000 Email thommar@epi-wa.com
betsy.wing@epi-wa.com

SAMPLES (signature) <u>Betsy Wing</u>		PO #
PROJECT NAME		74001.1
REMARKS		INVOICE TO
Brookdale		Ichijo USA

TURNOAROUND TIME <input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH 10 day 741 Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Archive Samples <input type="checkbox"/> Other
---	---

						ANALYSES REQUESTED										
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 (Dieldrin)	Method 8081 (Full Suite)	Notes	
AO1-27-SW-10:1.2	68	7/8/14	1331	Soil	1								X			
AO1-27-SW-11:0.8	69		1333		1								X			
AO1-27-SW-12:1	70		1340		1								X			
AO1-27-B-5:1.5	71		1341		1								X			
AO1-27-B-5:2.5	72		1344		1											HOLD
AO1-27-SW-13:6.6	73		1342		1								X			
AO1-27-SW-14:0.6	74		1350		1								X			
AO1-27-SW-15:0.6	75		1353		1								X			
AO1-27-B-6:1.5	76		1460		1								X			
AO1-27-B-6:2.5	77		1403		1											HOLD

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Received by:	<u>Betsy Wing</u>		<u>Betsy Wing</u>		<u>EP1</u>	7/9/14	613
Relinquished by:	<u>Michael L. L. L.</u>		<u>Michael L. L. L.</u>		<u>EP1</u>	7/9/14	613
Received by:							

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 31, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 907148

Dear Mr Morin:

Included are the additional results from the testing of material submitted on July 10, 2019 from the Brookdale 74001.1, F&BI 907148 project. There are 9 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0731R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 10, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 907148 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907148 -01	AOI-27-B-7:2
907148 -02	AOI-27-B-7:3
907148 -03	AOI-27-B-8:2
907148 -04	AOI-27-B-8:3
907148 -05	AOI-27-B-9:1.5
907148 -06	AOI-27-B-9:2.5
907148 -07	AOI-27-B-11:2
907148 -08	AOI-27-B-10:1.5
907148 -09	AOI-27-B-10:2.5
907148 -10	AOI-27-B-11:3
907148 -11	AOI-27-B-12:1
907148 -12	AOI-27-B-12:2
907148 -13	DUP-62
907148 -14	DUP-63
907148 -15	AOI-27-B-13:1
907148 -16	AOI-27-B-13:2
907148 -17	AOI-26-B-5:1.5
907148 -18	AOI-27-B-14:2
907148 -19	AOI-26-B-5:2.5
907148 -20	AOI-27-B-14:3
907148 -21	AOI-27-B-15:2
907148 -22	DUP-58
907148 -23	AOI-27-B-15:3
907148 -24	AOI-27-B-16:1
907148 -25	AOI-27-B-16:2
907148 -26	AOI-27-B-17:2
907148 -27	AOI-27-B-17:3
907148 -28	AOI-27-B-18:1
907148 -29	AOI-27-B-18:2
907148 -30	AOI-27-B-19:1.5
907148 -31	AOI-27-B-20:0.5
907148 -32	AOI-27-B-20:1.5
907148 -33	AOI-27-B-19:2.5
907148 -34	AOI-27-B-21:0.5
907148 -35	AOI-27-B-22:1.5
907148 -36	AOI-27-B-21:1.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907148 -37	AOI-27-B-22:2.5
907148 -38	AOI-28-B-1:1.5
907148 -39	AOI-28-SW-1:0.5
907148 -40	AOI-28-B-1:2.5
907148 -41	AOI-28-SW-2:0.5
907148 -42	DUP-64
907148 -43	AOI-28-SW-3:1
907148 -44	AOI-28-SW-4:0.5
907148 -45	AOI-28-SW-2:0.8
907148 -46	AOI-28-SW-1:1
907148 -47	AOI-28-SW-3:0.5
907148 -48	AOI-28-SW-4:0.5
907148 -49	AOI-28-SW-6:0.8
907148 -50	AOI-28-SW-5:1
907148 -51	AOI-31-B-1:1.5
907148 -52	AOI-31-B-1:2.5
907148 -53	AOI-31-B-2:1.5
907148 -54	DUP-65
907148 -55	AOI-31-B-3:1.5
907148 -56	AOI-31-B-2:2.5
907148 -57	AOI-31-B-3:2.5
907148 -58	AOI-31-B-4:1.5
907148 -59	AOI-31-B-4:2.5
907148 -60	AOI-32-SW-1:1
907148 -61	AOI-32-SW-7:1
907148 -62	AOI-32-B-1:2
907148 -63	AOI-32-B-1:3
907148 -64	AOI-32-B-2:1.5
907148 -65	AOI-32-B-2:2.5
907148 -66	AOI-32-SW-2:0.8
907148 -67	AOI-32-B-3:2
907148 -68	AOI-32-B-3:3
907148 -69	AOI-32-B-4:2
907148 -70	AOI-32-SW-3:1
907148 -71	AOI-32-B-5:3
907148 -72	AOI-32-B-4:3
907148 -73	AOI-32-B-5:2
907148 -74	AOI-32-B-6:1.5
907148 -75	AOI-32-B-6:2.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907148 -76	DUP-66
907148 -77	AOI-32-B-8:2
907148 -78	AOI-32-B-7:2
907148 -79	AOI-32-SW-4:1
907148 -80	DUP-67
907148 -81	AOI-32-B-7:3
907148 -82	AOI-32-B-8:3

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-10:2.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/22/19	Lab ID:	907148-09 1/6
Date Analyzed:	07/23/19	Data File:	072329.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.23

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-14:3	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/22/19	Lab ID:	907148-20 1/6
Date Analyzed:	07/23/19	Data File:	072330.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-15:3	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/22/19	Lab ID:	907148-23 1/6
Date Analyzed:	07/23/19	Data File:	072313.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.038

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/22/19	Lab ID:	09-1756 mb 1/6
Date Analyzed:	07/23/19	Data File:	072312.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	90	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/31/19

Date Received: 07/10/19

Project: Brookdale 74001.1, F&BI 907148

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907125-32 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.027	85 b	61 b	45-130	33 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	97	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

907148

SAMPLE CHAIN OF CUSTODY

ME 07-10-19

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at

9 103

Report To Thom Mason, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (206) 295-0010 Email thom@epi-wa.combetsy@epi-wa.com

SAMPLERS (signature) <u>Rebecca Beechler</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS <u>INVOICE TO Twin USA</u>	

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH 10 day TAT Rush charges authorized by: _____	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____
---	--

data-spy.com						ANALYSES REQUESTED											
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081- Distillate	Method 8081- Full Suite			
A01-27-B-7:2	01	7/9/19	0810	Soil	1								X				
A01-27-B-7:3	02		0815											X			
A01-27-B-8:2	03		0820														
A01-27-B-8:3	04		0825														
A01-27-B-9:1.5	05		0835										X				
A01-27-B-9:2.5	06		0840														
A01-27-B-11:2	07		0850										X				
A01-27-B-10:1.5	08		0851										X				
A01-27-B-10:2.5	09		0852														
A01-27-B-11:3	10		0855														
															TEBW 7/16/19 Notes ME		

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Requested by: <u>Rebecca Beechler</u>	PRINT NAME: <u>Betsy Wing</u>	COMPANY: <u>EPI</u>	DATE: <u>7/10/19</u>	TIME: <u>0830</u>
Received by: <u>Rebecca Beechler</u>	PRINT NAME: <u>Rebecca Beechler</u>	COMPANY: <u>Twin</u>	DATE: <u>7/10/19</u>	TIME: <u>1</u>
Relinquished by: _____	PRINT NAME: _____	COMPANY: _____	DATE: _____	TIME: _____
Received by: _____	PRINT NAME: _____	COMPANY: _____	DATE: _____	TIME: _____

Samples received at 3 of 10

907148

SAMPLE CHAIN OF CUSTODY

ME 07-10-19

2 of 9 pages

Report To Thom Illerich, Betsy WangCompany EP1Address 1180 N.W. Maple St, Ste 310City, State, ZIP Issaquah, WA 98127Phone 425-395-0010 Email thom.illerich@epi-wa.comBetsy Wang

SAMPLERS (signature)

Kirkner Brezice

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO
Idiyo
USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 10 day TAT

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-27-B-12:1	11	7/9/19	0857	Soil	1							X	HOLD
A01-27-B-12:2	12		0900		1							X	
DUP-62	13											X	
DUP-63	14											X	
A01-27-B-13:1	15		0906									X	
A01-27-B-13:2	16		0911										HOLD
A01-26-B-5:1.5	17		0925									X	
A01-27-B-14:2	18		0926									X	
A01-26-B-5:2.5	19		0928									X	
A01-27-B-14:3	20		0929									X	HOLD

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by:

Betsy Wang

Relinquished by:

Betsy WangEP17/10/190630

Received by:

MichaelEP17/10/190630

SAMPLE CHAIN OF CUSTODY

907148

ME 07-10-19 3 of 9

Report To Thom Merin, Betsy Wang

Company EP1

Address 1180 NW Maple St Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email thom@epi-wa.com

betsyw@epi-wa.com

SAMPLERS (signature) <u>Ruben Becerra</u>		PO #
PROJECT NAME <u>Brookdale</u>		74001.1
REMARKS		INVOICE TO <u>1chjo USA</u>

TURNAROUND TIME
<input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH 10 day <u>TAI</u> Rush charges authorized by:
SAMPLE DISPOSAL
<input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-27-B-15:2	21	7/9/19	0931	Soil	1								
Dup-58	22												HOLD
A01-27-B-15:3	23		0933										HOLD
A01-27-B-16:1	24		0935										HOLD
A01-27-B-16:2	25		0937										HOLD
A01-27-B-17:2	26		0959										HOLD
A01-27-B-17:3	27												HOLD
A01-27-B-18:1	28												HOLD
A01-27-B-18:2	29												HOLD
A01-27-B-19:1.5	30												HOLD

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>Betsy Wang</u>		Betsy Wang		EP1		7/10/19		0630	
Received by: <u>[Signature]</u>		Michael L. [Signature]		TALC					
Relinquished by:									
Received by:									

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SAMPLE CHAIN OF CUSTODY

ME 07-10-19

1 of 9

907148

Report To Thom Merin; Betsy Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Beaverton, OR 98007

Phone 425-395-0010 Email thom@ep1-wa.com

betsy@ep1-wa.com

SAMPLERS (signature) <u>Rebecca Beeser</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS	INVOICE TO <u>Living USA</u>

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround	<input checked="" type="checkbox"/> RUSH 10 days 1997
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	<input checked="" type="checkbox"/> Archive Samples
<input type="checkbox"/> Other	

Phone 425-395-0010 Email: info@businessof.com www.businessof.com						ANALYSES REQUESTED									
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes		
						Method 8081-Pieldrin	Method 8081-Full Suite								
A01-27-B-20:0.5	31	9/7/19	1007	Soil	1										
A01-27-B-20:1.5	32		1009										HOLD		
A01-27-B-19:2.5	33		1010												
A01-27-B-21:0.5	34		1024												
A01-27-B-22:1.5	35		1025												
A01-27-B-21:1.5	36		1026										HOLD		
A01-27-B-22:2.5	37		1030										HOLD		
A01-28-B-1:1.5	38		1050												
A01-28-SW-1:0.5	39		1054												
A01-28-B-1:2.5	40		1055										HOLD		

Relinquished by: Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
<u>Rebecca Beeser</u>		<u>Rebecca Beeser</u>		<u>EP1</u>		<u>7/10/19</u>		<u>0830</u>	
Received by:									

907148

SAMPLE CHAIN OF CUSTODY

ME 07-10-19 5 of 9

A03

Report To Thom Main, Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-0066 Email thom@ep-wa.com

betsy@ep-wa.com

SAMPLES (signature) <u>Alicia Bruce</u>	
PROJECT NAME	PO #
<u>Brockdale</u>	<u>74061.1</u>
REMARKS	INVOICE TO
	<u>Idaho USA</u>

TURNAROUND TIME
<input type="checkbox"/> Standard Turnaround
<input checked="" type="checkbox"/> RUSH <u>10 day</u>
Rush charges authorized by:
SAMPLE DISPOSAL
<input type="checkbox"/> Dispose after 30 days
<input checked="" type="checkbox"/> Archive Samples
<input type="checkbox"/> Other

ANALYSES REQUESTED						Notes
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	
A01-28-SW-2:0.5	41	7/9/19	1056	Soil	1	
Dup-64	42		—		1	
A01-28-SW-3:1	43		1059		1	
A01-28-SW-4:0.5	44		1102			
A01-31-SW-2:0.8	45		1128			
A01-31-SW-1:1	46		1132			
A01-31-SW-3:0.5	47		1135			
A01-31-SW-4:0.5	48		1139			
A01-31-SW-6:0.8	49		1142			
A01-31-SW-5:1	50		1146			
TPH-HCID						
TPH-Diesel						
TPH-Gasoline						
BTEX by 8021B						
VOCs by 8260C						
SVOCs by 8270D						
PAHs 8270D SIM						
Method 8081 Dieldrin						
Method 8081 Full Suite						

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNED BY		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>Betsy Wing</u>		<u>Betsy Wing</u>		<u>EP1</u>		<u>7/10/19</u>		<u>0630</u>	
Received by: <u>Alicia Bruce</u>		<u>Alicia Bruce</u>		<u>Idaho</u>					
Relinquished by:									
Received by:									

907148

SAMPLE CHAIN OF CUSTODY

ME 07-10-19

Page # 6 of 9

Report To Thom Morin, Betsy WineyCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425 395-0010 Email thom@epi-wa.combetsy@epi-wa.com

SAMPLERS (signature) <u>Rebecca Becerra</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS <u>1400.1</u>	INVOICE TO <u>U.S.A.</u>

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>10 day</u> <u>741</u> Rush charges authorized by:
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other

ANALYSES REQUESTED						Notes																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D		PAHs 8270D SIM	method 8081-Dieldrin	method 8081	Full Suite																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
A01-31-B-1:1.5	51	7/9/19	1158	Soil	1						X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Requested by: <u>Betsy Winey</u>	<u>Betsy Winey</u>	<u>EPI</u>	<u>7/10/19</u>	<u>0630</u>
Received by: <u>Michael E. L. L.</u>	<u>Michael E. L. L.</u>	<u>T.B.L.</u>	<u>7</u>	<u>7</u>
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

907148

SAMPLE CHAIN OF CUSTODY

ME 07-10-19

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AB3

Report To Thom Merin; Betsy WingCompany EP1Address 1180 NW Maple St Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-345-0000 Email thom.merin@ep1-wa.combetsy.wing@ep1-wa.com

SAMPLES (signature) <u>Albee Breene</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74061.1</u>
REMARKS <u>Brookdale</u>	INVOICE TO <u>1 div 10 USA</u>

TURNAROUND TIME <u>10 day THT</u>	
<input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH Rush charges authorized by:	
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other	

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-32-SW-7:1	61	7/9/19	1245	Soil	1								X
A01-32-B-1:2	62		1250										X
A01-32-B-1:3	63		1253										HOLD
A01-32-B-2:1.5	64		1254										X
A01-32-B-2:2.5	65		1258										HOLD
A01-32-SW-2:0.8	66		1259										X
A01-32-B-3:2	67		1301										X
A01-32-B-3:3	68		1303										HOLD
A01-32-B-4:2	69		1304										X
A01-32-SW-3:1	70		1305										X

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: <u>Betsy Wing</u>	PRINT NAME <u>Betsy Wing</u>	COMPANY <u>EP1</u>	DATE <u>7/10/19</u>	TIME <u>0630</u>
Received by: <u>Whit E. Lind</u>				
Relinquished by:				
Received by:				

907148

SAMPLE CHAIN OF CUSTODY

ME 07-10-19

8 of 9

Report To Thom Morris, Betsy Wing
Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email thom@epi-wa.com
betsy@epi-wa.com

SAMPLERS (signature) <u>Suben Beerna</u>	
PROJECT NAME	PO #
<u>Brookdale</u>	
REMARKS	INVOICE TO
	<u>7400.1</u>
	<u>Idiyo</u>
	<u>USA</u>

TURNAROUND TIME
<input type="checkbox"/> Standard Turnaround
<input checked="" type="checkbox"/> RUSH <u>10 day TAT</u>
Rush charges authorized by:
SAMPLE DISPOSAL
<input type="checkbox"/> Dispose after 30 days
<input checked="" type="checkbox"/> Archive Samples
<input type="checkbox"/> Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081-Dieldrin	Method 8081-Full Suite		
A01-32-B-5:3	71	7/9/19	1307	Soil	1											HOLD
A01-32-B-4:3	72		1309													HOLD
A01-32-B-5:2	73		1310													
A01-32-B-6:1.5	74		1313													HOLD
A01-32-B-6:2.5	75		1315													
Dup-b6	76															
A01-32-B-8:2	77		1327													
A01-32-B-7:2	78		1328													
A01-32-SW-4:1	79		1330													
Dup-b7	80															

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
<u>Relinquished by: Betsy Wing</u>		<u>Betsy Wing</u>		<u>EPI</u>		<u>7/10/19</u>	<u>0650</u>
<u>Received by: Michael E. Lio</u>		<u>Michael E. Lio</u>		<u>TIB</u>		<u>L</u>	<u>L</u>
Relinquished by:							
Received by:							

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

9 A03

patrycja.rpi-usa.com

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other _____

[illegible]

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

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www.friedmanandbruya.com

July 22, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001.1, F&BI 907148

Dear Mr Morin:

Included are the results from the testing of material submitted on July 10, 2019 from the Brookdale 74001.1, F&BI 907148 project. There are 67 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0722R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 10, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001.1, F&BI 907148 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907148 -01	AOI-27-B-7:2
907148 -02	AOI-27-B-7:3
907148 -03	AOI-27-B-8:2
907148 -04	AOI-27-B-8:3
907148 -05	AOI-27-B-9:1.5
907148 -06	AOI-27-B-9:2.5
907148 -07	AOI-27-B-11:2
907148 -08	AOI-27-B-10:1.5
907148 -09	AOI-27-B-10:2.5
907148 -10	AOI-27-B-11:3
907148 -11	AOI-27-B-12:1
907148 -12	AOI-27-B-12:2
907148 -13	DUP-62
907148 -14	DUP-63
907148 -15	AOI-27-B-13:1
907148 -16	AOI-27-B-13:2
907148 -17	AOI-26-B-5:1.5
907148 -18	AOI-27-B-14:2
907148 -19	AOI-26-B-5:2.5
907148 -20	AOI-27-B-14:3
907148 -21	AOI-27-B-15:2
907148 -22	DUP-58
907148 -23	AOI-27-B-15:3
907148 -24	AOI-27-B-16:1
907148 -25	AOI-27-B-16:2
907148 -26	AOI-27-B-17:2
907148 -27	AOI-27-B-17:3
907148 -28	AOI-27-B-18:1
907148 -29	AOI-27-B-18:2
907148 -30	AOI-27-B-19:1.5
907148 -31	AOI-27-B-20:0.5
907148 -32	AOI-27-B-20:1.5
907148 -33	AOI-27-B-19:2.5
907148 -34	AOI-27-B-21:0.5
907148 -35	AOI-27-B-22:1.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (Continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907148 -36	AOI-27-B-21:1.5
907148 -37	AOI-27-B-22:2.5
907148 -38	AOI-28-B-1:1.5
907148 -39	AOI-28-SW-1:0.5
907148 -40	AOI-28-B-1:2.5
907148 -41	AOI-28-SW-2:0.5
907148 -42	DUP-64
907148 -43	AOI-28-SW-3:1
907148 -44	AOI-28-SW-4:0.5
907148 -45	AOI-31-SW-2:0.8
907148 -46	AOI-31-SW-1:1
907148 -47	AOI-31-SW-3:0.5
907148 -48	AOI-31-SW-4:0.5
907148 -49	AOI-31-SW-6:0.8
907148 -50	AOI-31-SW-5:1
907148 -51	AOI-31-B-1:1.5
907148 -52	AOI-31-B-1:2.5
907148 -53	AOI-31-B-2:1.5
907148 -54	DUP-65
907148 -55	AOI-31-B-3:1.5
907148 -56	AOI-31-B-2:2.5
907148 -57	AOI-31-B-3:2.5
907148 -58	AOI-31-B-4:1.5
907148 -59	AOI-31-B-4:2.5
907148 -60	AOI-32-SW-1:1
907148 -61	AOI-32-SW-7:1
907148 -62	AOI-32-B-1:2
907148 -63	AOI-32-B-1:3
907148 -64	AOI-32-B-2:1.5
907148 -65	AOI-32-B-2:2.5
907148 -66	AOI-32-SW-2:0.8
907148 -67	AOI-32-B-3:2
907148 -68	AOI-32-B-3:3
907148 -69	AOI-32-B-4:2
907148 -70	AOI-32-SW-3:1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (Continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907148 -71	AOI-32-B-5:3
907148 -72	AOI-32-B-4:3
907148 -73	AOI-32-B-5:2
907148 -74	AOI-32-B-6:1.5
907148 -75	AOI-32-B-6:2.5
907148 -76	DUP-66
907148 -77	AOI-32-B-8:2
907148 -78	AOI-32-B-7:2
907148 -79	AOI-32-SW-4:1
907148 -80	DUP-67
907148 -81	AOI-32-B-7:3
907148 -82	AOI-32-B-8:3

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-7:2	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-01 1/6
Date Analyzed:	07/13/19	Data File:	071308.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-8:2	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/10/19	Lab ID:	907148-03 1/6
Date Analyzed:	07/11/19	Data File:	071138.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-9:1.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-05 1/6
Date Analyzed:	07/15/19	Data File:	071537.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-11:2	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-07 1/6
Date Analyzed:	07/15/19	Data File:	071538.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-10:1.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-08 1/6
Date Analyzed:	07/15/19	Data File:	071539.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.094

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-12:1	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-11 1/6
Date Analyzed:	07/15/19	Data File:	071540.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-62	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-13 1/6
Date Analyzed:	07/15/19	Data File:	071541.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.013

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-63	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-14 1/6
Date Analyzed:	07/15/19	Data File:	071542.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-13:1	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-15 1/6
Date Analyzed:	07/15/19	Data File:	071543.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-5:1.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-17 1/6
Date Analyzed:	07/15/19	Data File:	071544.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.19

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-14:2	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-18 1/6
Date Analyzed:	07/15/19	Data File:	071545.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-5:2.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-19 1/6
Date Analyzed:	07/15/19	Data File:	071547.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-15:2	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-21 1/6
Date Analyzed:	07/15/19	Data File:	071548.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.21

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-16:1	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-24 1/6
Date Analyzed:	07/15/19	Data File:	071549.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-17:2	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-26 1/6
Date Analyzed:	07/16/19	Data File:	071550.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-18:1	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-28 1/6
Date Analyzed:	07/16/19	Data File:	071551.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-19:1.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-30 1/6
Date Analyzed:	07/16/19	Data File:	071552.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.010

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-20:0.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-31 1/6
Date Analyzed:	07/16/19	Data File:	071553.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.022

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-20:1.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-32 1/6
Date Analyzed:	07/13/19	Data File:	071305.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.024

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-21:0.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-34 1/6
Date Analyzed:	07/16/19	Data File:	071554.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.031

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-22:1.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-35 1/6
Date Analyzed:	07/16/19	Data File:	071555.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-28-B-1:1.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-38 1/6
Date Analyzed:	07/16/19	Data File:	071556.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-28-SW-1:0.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-39 1/120
Date Analyzed:	07/17/19	Data File:	071706.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70 d	50	150
DBC	91 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	2.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-28-SW-2:0.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-41 1/60
Date Analyzed:	07/17/19	Data File:	071707.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78 d	50	150
DBC	89 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-64	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-42 1/6
Date Analyzed:	07/13/19	Data File:	071311.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.028

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-28-SW-3:1	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-43 1/60
Date Analyzed:	07/15/19	Data File:	071508.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79 d	50	150
DBC	85 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.85

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-28-SW-4:0.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-44 1/60
Date Analyzed:	07/17/19	Data File:	071708.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65 d	50	150
DBC	39 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.75

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-31-SW-2:0.8	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-45 1/6
Date Analyzed:	07/13/19	Data File:	071314.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.018

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-31-SW-1:1	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-46 1/6
Date Analyzed:	07/13/19	Data File:	071315.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-31-SW-3:0.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-47 1/6
Date Analyzed:	07/13/19	Data File:	071316.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-31-SW-4:0.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-48 1/6
Date Analyzed:	07/13/19	Data File:	071317.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-31-SW-6:0.8	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-49 1/6
Date Analyzed:	07/13/19	Data File:	071318.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-31-SW-5:1	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-50 1/6
Date Analyzed:	07/13/19	Data File:	071319.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.057

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-31-B-1:1.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-51 1/6
Date Analyzed:	07/13/19	Data File:	071321.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-31-B-2:1.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-53 1/6
Date Analyzed:	07/13/19	Data File:	071322.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-65	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-54 1/6
Date Analyzed:	07/13/19	Data File:	071323.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-31-B-3:1.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-55 1/6
Date Analyzed:	07/13/19	Data File:	071324.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-31-B-2:2.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-56 1/6
Date Analyzed:	07/13/19	Data File:	071325.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-31-B-4:1.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/12/19	Lab ID:	907148-58 1/6
Date Analyzed:	07/16/19	Data File:	071607.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-SW-1:1	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-60 1/6
Date Analyzed:	07/16/19	Data File:	071617.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-SW-7:1	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-61 1/6
Date Analyzed:	07/16/19	Data File:	071618.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.028

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-B-1:2	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/10/19	Lab ID:	907148-62 1/6
Date Analyzed:	07/11/19	Data File:	071139.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-B-2:1.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-64 1/6
Date Analyzed:	07/16/19	Data File:	071619.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-SW-2:0.8	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-66 1/6
Date Analyzed:	07/16/19	Data File:	071620.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-B-3:2	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-67 1/6
Date Analyzed:	07/16/19	Data File:	071626.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-B-4:2	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-69 1/6
Date Analyzed:	07/16/19	Data File:	071627.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.012

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-SW-3:1	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/10/19	Lab ID:	907148-70 1/6
Date Analyzed:	07/11/19	Data File:	071140.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.12
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	0.011
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-B-5:2	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-73 1/6
Date Analyzed:	07/16/19	Data File:	071628.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-B-6:1.5	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-74 1/6
Date Analyzed:	07/16/19	Data File:	071629.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-66	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-76 1/6
Date Analyzed:	07/16/19	Data File:	071630.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-B-8:2	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/10/19	Lab ID:	907148-77 1/6
Date Analyzed:	07/11/19	Data File:	071141.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-B-7:2	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/10/19	Lab ID:	907148-78 1/6
Date Analyzed:	07/11/19	Data File:	071142.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-SW-4:1	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-79 1/6
Date Analyzed:	07/16/19	Data File:	071631.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-67	Client:	Environmental Partners
Date Received:	07/10/19	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	907148-80 1/6
Date Analyzed:	07/16/19	Data File:	071632.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/10/19	Lab ID:	09-1643 mb 1/6
Date Analyzed:	07/11/19	Data File:	071111.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	111	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	09-1652 mb 1/6
Date Analyzed:	07/12/19	Data File:	071220.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/11/19	Lab ID:	09-1653 mb 1/6
Date Analyzed:	07/12/19	Data File:	071221.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001.1, F&BI 907148
Date Extracted:	07/12/19	Lab ID:	09-1654 mb 1/6
Date Analyzed:	07/16/19	Data File:	071606.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/22/19

Date Received: 07/10/19

Project: Brookdale 74001.1, F&BI 907148

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR ORGANOCHLORINE PESTICIDES BY EPA METHOD 8081B

Laboratory Code: 907125-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	<0.01	82	88	45-111	7
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	<0.01	89	93	50-117	4
beta-BHC	mg/kg (ppm)	0.1	<0.01	87	92	49-109	6
delta-BHC	mg/kg (ppm)	0.1	<0.01	90	93	39-114	3
Heptachlor	mg/kg (ppm)	0.1	<0.01	105	112	40-131	6
Aldrin	mg/kg (ppm)	0.1	<0.01	88	93	44-121	6
Heptachlor Epoxide	mg/kg (ppm)	0.1	<0.01	91	95	46-122	4
trans-Chlordane	mg/kg (ppm)	0.1	<0.01	90	94	41-129	4
cis-Chlordane	mg/kg (ppm)	0.1	<0.01	93	96	44-120	3
4,4'-DDE	mg/kg (ppm)	0.1	<0.01	84	87	50-150	4
Endosulfan I	mg/kg (ppm)	0.1	<0.01	87	91	45-124	4
Dieldrin	mg/kg (ppm)	0.1	<0.01	91	95	45-130	4
Endrin	mg/kg (ppm)	0.1	<0.01	111	113	50-140	2
4,4'-DDD	mg/kg (ppm)	0.1	<0.01	105	108	26-155	3
Endosulfan II	mg/kg (ppm)	0.1	<0.01	85	88	40-135	3
4,4'-DDT	mg/kg (ppm)	0.1	<0.01	102	104	50-150	2
Endrin Aldehyde	mg/kg (ppm)	0.1	<0.01	86	90	35-139	5
Methoxychlor	mg/kg (ppm)	0.1	<0.01	109	121	28-162	10
Endosulfan Sulfate	mg/kg (ppm)	0.1	<0.01	94	96	40-141	2
Endrin Ketone	mg/kg (ppm)	0.1	<0.01	99	102	41-147	3
Toxaphene	mg/kg (ppm)	4	<1	73	77	50-150	5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/22/19

Date Received: 07/10/19

Project: Brookdale 74001.1, F&BI 907148

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
alpha-BHC	mg/kg (ppm)	0.1	94	56-113
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	97	58-120
beta-BHC	mg/kg (ppm)	0.1	89	70-130
delta-BHC	mg/kg (ppm)	0.1	91	70-130
Heptachlor	mg/kg (ppm)	0.1	95	56-124
Aldrin	mg/kg (ppm)	0.1	112	70-130
Heptachlor Epoxide	mg/kg (ppm)	0.1	106	70-130
trans-Chlordane	mg/kg (ppm)	0.1	89	60-123
cis-Chlordane	mg/kg (ppm)	0.1	103	70-130
4,4'-DDE	mg/kg (ppm)	0.1	92	70-130
Endosulfan I	mg/kg (ppm)	0.1	119	62-124
Dieldrin	mg/kg (ppm)	0.1	97	70-130
Endrin	mg/kg (ppm)	0.1	100	56-147
4,4'-DDD	mg/kg (ppm)	0.1	94	54-137
Endosulfan II	mg/kg (ppm)	0.1	97	42-140
4,4'-DDT	mg/kg (ppm)	0.1	89	25-169
Endrin Aldehyde	mg/kg (ppm)	0.1	91	21-135
Methoxychlor	mg/kg (ppm)	0.1	95	54-154
Endosulfan Sulfate	mg/kg (ppm)	0.1	112	39-148
Endrin Ketone	mg/kg (ppm)	0.1	106	46-134
Toxaphene	mg/kg (ppm)	4	103	56-145

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/22/19

Date Received: 07/10/19

Project: Brookdale 74001.1, F&BI 907148

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907148-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	71	73	45-130	3

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	91	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/22/19

Date Received: 07/10/19

Project: Brookdale 74001.1, F&BI 907148

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907148-32 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.021	71 b	58 b	45-130	20 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	90	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/22/19

Date Received: 07/10/19

Project: Brookdale 74001.1, F&BI 907148

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907148-58 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	76	78	45-130	3

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	94	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

907148

SAMPLE CHAIN OF CUSTODY

ME 07-10-19

1

at

9 103

Report To Thom Mason, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (206) 295-0010 Email thom@epi-wa.combetsy@epi-wa.com

SAMPLERS (signature) <u>Rebecca Beechler</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS <u>INVOICE TO Twin USA</u>	

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH 10 day TAT Rush charges authorized by: _____	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____
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data-spy.com						ANALYSES REQUESTED											
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081- Distillate	Method 8081- Full Suite			
A01-27-B-7:2	01	7/9/19	0810	Soil	1								X		PEBW 7/16/19 Notes ME		
A01-27-B-7:3	02		0815														
A01-27-B-8:2	03		0820										X				
A01-27-B-8:3	04		0825														
A01-27-B-9:1.5	05		0835										X				
A01-27-B-9:2.5	06		0840												HOLD		
A01-27-B-11:2	07		0850										X				
A01-27-B-10:1.5	08		0851										X		HOLD		
A01-27-B-10:2.5	09		0852														
A01-27-B-11:3	10		0855												HOLD		

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Requested by: <u>Rebecca Beechler</u>	PRINT NAME: <u>Betsy Wing</u>	COMPANY: <u>EPI</u>	DATE: <u>7/10/19</u>	TIME: <u>0830</u>
Received by: <u>Rebecca Beechler</u>	PRINT NAME: <u>Rebecca Beechler</u>	COMPANY: <u>Twin</u>	DATE: <u>7/10/19</u>	TIME: <u>1</u>
Relinquished by: _____	PRINT NAME: _____	COMPANY: _____	DATE: _____	TIME: _____
Received by: _____	PRINT NAME: _____	COMPANY: _____	DATE: _____	TIME: _____

Samples received at

3

907148

SAMPLE CHAIN OF CUSTODY

ME 07-10-19

of

2 903

Report To Thom Illerich, Betsy WangCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98127Phone 425-395-0010 Email thom.illerich@epi-wa.comBetsy Wang

SAMPLERS (signature) <u>Kirkner</u>		PO # <u>1001.1</u>
PROJECT NAME <u>Brookdale</u>		INVOICE TO <u>USA</u>
REMARKS		

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>10 day TAT</u> Rush charges authorized by: _____	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____
--	--

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-27-B-12:1	11	7/9/19	0857	Soil	1							X	HOLD
A01-27-B-12:2	12		0900		1							X	
DUP-62	13											X	
DUP-63	14											X	
A01-27-B-13:1	15		0906									X	
A01-27-B-13:2	16		0911										HOLD
A01-26-B-5:1.5	17		0925									X	
A01-27-B-14:2	18		0926									X	
A01-26-B-5:2.5	19		0928									X	
A01-27-B-14:3	20		0929									X	HOLD

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
<u>Betsy Wang</u>		<u>Betsy Wang</u>		<u>EP1</u>		<u>7/10/19</u>		<u>0630</u>	
Relinquished by:									
Received by:									

SAMPLE CHAIN OF CUSTODY

ME 07-10-19 3 of 9

907148

Report To Thom Merin, Betsy Wang

Company EP1

Address 1180 NW Maple St Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email thom@epi-wa.com

betsey@epi-wa.com

SAMPLERS (signature)		PO #	
PROJECT NAME		74001.1	
REMARKS		INVOICE TO	
Brookdale		1chjo	
		USA	
TURNAROUND TIME		SAMPLE DISPOSAL	
<input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH 10 day <u>TA</u> Rush charges authorized by:		<input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-27-B-15:2	21	7/9/19	0931	Soil	1								
Dup-58	22												HOLD
A01-27-B-15:3	23		0933										HOLD
A01-27-B-16:1	24		0935										HOLD
A01-27-B-16:2	25		0937										HOLD
A01-27-B-17:2	26		0959										HOLD
A01-27-B-17:3	27												HOLD
A01-27-B-18:1	28												HOLD
A01-27-B-18:2	29												HOLD
A01-27-B-19:1.5	30												HOLD

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>Betsy Wang</u>		Betsy Wang		EP1		7/10/19		0630	
Received by: <u>[Signature]</u>		Michael L. [Signature]		T.L.R.					
Relinquished by:									
Received by:									

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SAMPLE CHAIN OF CUSTODY

ME 07-10-19

1 of 9

907148

Report To Thom Merin; Betsy Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Beaverton, OR 98007

Phone 425-395-0010 Email thom@ep1-wa.com

betsy@ep1-wa.com

SAMPLERS (signature) <u>Rebecca Beeser</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS	INVOICE TO <u>Living USA</u>

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround	<input checked="" type="checkbox"/> RUSH 10 days 1997
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	<input checked="" type="checkbox"/> Archive Samples
<input type="checkbox"/> Other	

Phone 425-395-0010 Email td@mmcoepi-wa.com tdsavage@epi-wa.com											ANALYSES REQUESTED									
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes				
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081-Pieldrin	Method 8081-Full Suite						
A01-27-B-20:0.5	31	9/7/19	1007	Soil	1									X						
A01-27-B-20:1.5	32		1009												X					
A01-27-B-19:2.5	33		1010												X					
A01-27-B-21:0.5	34		1024												X					
A01-27-B-22:1.5	35		1025												X					
A01-27-B-21:1.5	36		1026																	
A01-27-B-22:2.5	37		1030																	
A01-28-B-1:1.5	38		1050												X					
A01-28-SW-1:0.5	39		1054																	
A01-28-B-1:2.5	40		1055																	

Relinquished by: Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
<u>Rebecca Beeser</u>		<u>Rebecca Beeser</u>		<u>EP1</u>		<u>7/10/19</u>		<u>0830</u>	
Relinquished by:									
Received by:									

907148

SAMPLE CHAIN OF CUSTODY

ME 07-10-19 5 of 9 A03

Report To Thom Main, Betsy Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0066 Email thom@ep-wa.com

betsy@ep-wa.com

SAMPLES (signature) <u>Alicia Bruce</u>	
PROJECT NAME	PO #
<u>Brookdale</u>	<u>74061.1</u>
REMARKS	INVOICE TO
	<u>Idaho USA</u>
TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround	
<input checked="" type="checkbox"/> RUSH <u>10 day</u>	
Rush charges authorized by: <u>MT</u>	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	
<input checked="" type="checkbox"/> Archive Samples	
<input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED						Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM
A01-28-SW-2:0.5	41	7/9/19	1056	Soil	1							X
Dup-64	42											
A01-28-SW-3:1	43		1059									
A01-28-SW-4:0.5	44		1102									
A01-31-SW-2:0.8	45		1128									
A01-31-SW-1:1	46		1132									
A01-31-SW-3:0.5	47		1135									
A01-31-SW-4:0.5	48		1139									
A01-31-SW-6:0.8	49		1142									
A01-31-SW-5:1	50		1146									

SIGNED BY		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>Betsy Wing</u>		Betsy Wing		EP1		7/10/19		0630	
Received by: <u>Alicia Bruce</u>		Alicia Bruce		Idaho					
Relinquished by:									
Received by:									

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

907148

SAMPLE CHAIN OF CUSTODY

ME 07-10-19

Page # 6 of 9

Report To Thom Morin, Betsy WineyCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425 395-0010 Email thom@epi-wa.combetsy@epi-wa.com

SAMPLERS (signature) <u>Rebecca Becerra</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001.1</u>
REMARKS <u>1400.1</u>	INVOICE TO <u>U.S.A.</u>

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>10 day</u> <u>741</u> Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other
---	--

ANALYSES REQUESTED						Notes														
TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D		PAHs 8270D SIM	method 8081-Dieldrin	method 8081	Full Suite										
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars															
A01-31-B-1:1.5	51	7/9/19	1158	Soil	1						X									
A01-31-B-1:2.5	52		1202		1															
A01-31-B-2:1.5	53		1207		1															
DUP-65	54		—																	
A01-31-B-3:1.5	55		1208		1															
A01-31-B-2:2.5	56		1210																	
A01-31-B-3:2.5	57		1211																	
A01-31-B-4:1.5	58		1220																	
A01-31-B-4:2.5	59		1225																	
A01-32-SW-1:1	60		1240																	

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Requested by: <u>Betsy Winey</u>	<u>Betsy Winey</u>	<u>EPI</u>	<u>7/10/19</u>	<u>0630</u>
Received by: <u>Michael E. L. L.</u>	<u>Michael E. L. L.</u>	<u>EPI</u>	<u>7/10/19</u>	<u>7</u>
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

907148

SAMPLE CHAIN OF CUSTODY

ME 07-10-19

7

of

9

AB3

Report To Thom Merin; Betsy WingCompany EP1Address 1180 NW Maple St Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-345-0000 Email thom.merin@ep1-wa.combetsy.wing@ep1-wa.com

SAMPLES (signature) <u>Albee Breene</u>	
PROJECT NAME	PO #
<u>Brookdale</u>	<u>74061.1</u>
REMARKS	INVOICE TO
	<u>1 div 10</u>
	<u>USA</u>

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround	
<input checked="" type="checkbox"/> RUSH 10 day TAT	
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	
<input checked="" type="checkbox"/> Archive Samples	
<input type="checkbox"/> Other	

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-32-SW-7:1	61	7/6/19	1245	Soil	1								X
A01-32-B-1:2	62		1250										X
A01-32-B-1:3	63		1253										
A01-32-B-2:1.5	64		1254										X
A01-32-B-2:2.5	65		1258										
A01-32-SW-2:0.8	66		1259										X
A01-32-B-3:2	67		1301										X
A01-32-B-3:3	68		1303										
A01-32-B-4:2	69		1304										X
A01-32-SW-3:1	70		1305										X

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: <u>Betsy Wing</u>	PRINT NAME	COMPANY	DATE	TIME
Received by: <u>Whit E. Lind</u>				
Relinquished by:				
Received by:				

907148

SAMPLE CHAIN OF CUSTODY

ME 07-10-19

8 of 9

Report To Thom Morris, Betsy Wing
Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email thom@epi-wa.com
betsy@epi-wa.com

SAMPLERS (signature) <u>Suben Beerna</u>	
PROJECT NAME	PO #
<u>Brookdale</u>	
REMARKS	INVOICE TO
	<u>7400.1</u>
	<u>Idiyo</u>
	<u>USA</u>

TURNAROUND TIME
<input type="checkbox"/> Standard Turnaround
<input checked="" type="checkbox"/> RUSH <u>10 day TAT</u>
Rush charges authorized by:
SAMPLE DISPOSAL
<input type="checkbox"/> Dispose after 30 days
<input checked="" type="checkbox"/> Archive Samples
<input type="checkbox"/> Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081-Dieldrin	Method 8081-Full Suite		
A01-32-B-5:3	71	7/9/19	1307	Soil	1											HOLD
A01-32-B-4:3	72		1309													HOLD
A01-32-B-5:2	73		1310													
A01-32-B-6:1.5	74		1313													HOLD
A01-32-B-6:2.5	75		1315													
Dup-b6	76															
A01-32-B-8:2	77		1327													
A01-32-B-7:2	78		1328													
A01-32-SW-4:1	79		1330													
Dup-b7	80															

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
<u>Relinquished by: Betsy Wing</u>		<u>Betsy Wing</u>		<u>EPI</u>		<u>7/10/19</u>	<u>0650</u>
<u>Received by: Michael E. Lio</u>		<u>Michael E. Lio</u>		<u>FIH</u>		<u>L</u>	<u>L</u>
Relinquished by:							
Received by:							

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

9 A03

patrycja.rpi-usa.com

☐ Other _____[illegible]

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 9, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 907171

Dear Mr Morin:

Included are the additional results from the testing of material submitted on July 11, 2019 from the Brookdale 74001, F&BI 907171 project. There are 6 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0909R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 11, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 907171 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907171 -01	AOI-32-SW-5:1
907171 -02	AOI-32-B-9:2
907171 -03	AOI-32-SW-6:1
907171 -04	AOI-32-B-9:3
907171 -05	AOI-32-B-10:1.5
907171 -06	AOI-32-B-10:2.5
907171 -07	AOI-32-B-11:2
907171 -08	AOI-32-B-11:3
907171 -09	AOI-32-B-12:2
907171 -10	AOI-32-B-13:1.5
907171 -11	AOI-32-B-12:3
907171 -12	AOI-32-B-13:2.5
907171 -13	AOI-32-B-14:1.5
907171 -14	AOI-32-B-14:2.5
907171 -15	AOI-32-B-15:1.5
907171 -16	AOI-32-B-15:2.5
907171 -17	AOI-33-SW-1:1
907171 -18	AOI-33-SW-2:1
907171 -19	AOI-33-SW-3:1
907171 -20	AOI-33-SW-4:1
907171 -21	AOI-33-SW-5:1
907171 -22	AOI-33-SW-6:1
907171 -23	DUP-68
907171 -24	DUP-69
907171 -25	DUP-70
907171 -26	AOI-33-SW-7:1
907171 -27	AOI-33-B-1:2
907171 -28	AOI-33-B-1:3
907171 -29	AOI-33-B-2:2
907171 -30	AOI-33-B-2:3
907171 -31	AOI-33-B-3:2
907171 -32	AOI-33-B-3:3
907171 -33	AOI-33-B-4:1
907171 -34	AOI-33-B-4:2
907171 -35	AOI-33-B-5:1.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (Continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907171 -36	AOI-33-B-5:2.5
907171 -37	AOI-33-B-6:2
907171 -38	AOI-33-B-7:1
907171 -39	AOI-33-B-6:3
907171 -40	AOI-33-B-8:1
907171 -41	AOI-33-B-7:2
907171 -42	AOI-33-B-8:2
907171 -43	AOI-33-B-9:2
907171 -44	AOI-33-B-9:3
907171 -45	AOI-33-B-10:1
907171 -46	AOI-33-B-10:2
907171 -47	AOI-33-B-11:2
907171 -48	DUP-71
907171 -49	AOI-33-B-12:1.5
907171 -50	AOI-33-B-11:3
907171 -51	AOI-33-B-12:2.5
907171 -52	AOI-34-SW-1:0.5
907171 -53	AOI-34-SW-2:0.5
907171 -54	AOI-34-SW-3:0.5
907171 -55	AOI-34-B-1:1
907171 -56	AOI-34-B-1:2
907171 -57	AOI-34-SW-4:0.5
907171 -58	AOI-34-B-2:1
907171 -59	AOI-34-B-2:2
907171 -60	DUP-72
907171 -61	AOI-01-SW-1:0.5
907171 -62	AOI-01-SW-2:0.5
907171 -63	AOI-01-SW-3:0.5
907171 -64	AOI-01-SW-4:0.5
907171 -65	AOI-01-B-1:1
907171 -66	AOI-01-B-1:2
907171 -67	DUP-73

Samples were requested to be analyzed outside of holding time. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-B-15:2.5 ht	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	09/04/19	Lab ID:	907171-16 1/6
Date Analyzed:	09/05/19	Data File:	090508.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	09/05/19	Lab ID:	09-2182 mb2 1/6
Date Analyzed:	09/05/19	Data File:	090505.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	100	50	150
DBC	113	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/09/19

Date Received: 07/11/19

Project: Brookdale 74001, F&BI 907171

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 909012-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	87	78	45-130	11

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	96	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY ME 07-11-19

Page # 1 of 8

Report To Thom Mann, Betsy Wing

Company EP1

Address 1180 NW Maple, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email thommann@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature) <u>Betsy Wing</u>		PO # <u>74001</u>
PROJECT NAME <u>Brookdale</u>		INVOICE TO <u>1ckijo usf</u>
REMARKS		

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround	<input type="checkbox"/> RUSH <u>10 day</u> <u>1AT</u>
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	<input checked="" type="checkbox"/> Archive Samples
<input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED								Notes	
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 (field kit)		Method 8081 (Full Suite)
A01-32-SW-S-1	01	7/10/19	0835	soil	1							X		7/30/19 ME	■ - per SW
A01-32-B-9-2	02		0840		1							X			
A01-32-SW-L-1	03		0845		1							X			
A01-32-B-9-3	04		0846		1									HOLD	
A01-32-B-10-1.5	05		0854		1							X			
A01-32-B-10-2.5	06		0900		1									HOLD	
A01-32-B-11-2	07		0906		1							X			
A01-32-B-11-3	08		0910		1							■		HOLD	
A01-32-B-12-2	09		0915		1								X		
A01-32-B-13-1.5	10		0918		1							X			

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Disinfect by: <u>Betsy Wing</u>		Betsy Wing		EP1		7/11/19		0604	
Received by: <u>M. L. L. L.</u>		M. L. L. L.		FR		1		1	
Relinquished by:									
Received by:				Samples received at <u>30C</u>					

907171

SAMPLE CHAIN OF CUSTODY ME 07-11-19

Page # 2 of 8

Report To: Thom, Morin, Betsy Wing

Company: EPI

Address: 1180 NW Maple St, Ste 310

City, State, ZIP: Issaquah, WA 98027

Phone: (425) 385-0010 Email: thom@epi-wa.com
brady@epi-wa.com

SAMPLERS (signature) <u>Betsy Wing</u>		PO # <u>74001</u>
PROJECT NAME <u>Brookdale</u>		INVOICE TO <u>10010 USA</u>
REMARKS		

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround	<input checked="" type="checkbox"/> RUSH 10 Day TAT
Rush charges authorized by:	
SAMPLE DISPOSAL:	
<input type="checkbox"/> Dispose after 30 days	<input checked="" type="checkbox"/> Archive Samples
Other	

						ANALYSES REQUESTED										Notes
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081 (Dieldrin)	method 8081 (Full Suite)		
A01-32-B-12:3	11	7/10/19	0914	Soil	1								<input checked="" type="checkbox"/>			HOLD
A01-32-B-13:2.5	12		0922		1								<input checked="" type="checkbox"/>			HOLD
A01-32-B-14:1.5	13		0926		1								<input checked="" type="checkbox"/>			
A01-32-B-14:2.5	14		0930		1											HOLD
A01-32-B-15:1.5	15		0935		1								<input checked="" type="checkbox"/>			
A01-32-B-15:2.5	16		0939		1								<input checked="" type="checkbox"/>			HOLD
A01-33-SW-1:1	17		0955		1								<input checked="" type="checkbox"/>			
A01-33-SW-2:1	18		1001		1								<input checked="" type="checkbox"/>			
A01-33-SW-3:1	19		1007		1								<input checked="" type="checkbox"/>			
A01-33-SW-4:1	20		1013		1								<input checked="" type="checkbox"/>			

Handwritten: Handwritten
6/26/19
ME

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
<u>Betsy Wing</u>		<u>Betsy Wing</u>		<u>EPI</u>		<u>7/11/19</u>		<u>0607</u>	
Relinquished by:		Relinquished by:		Relinquished by:		Relinquished by:		Relinquished by:	
Received by:		Received by:		Received by:		Received by:		Received by:	

907171

SAMPLE CHAIN OF CUSTODY ME 07-11-19

Page # 3 of 8

Report To: Inom Moring, Betsy Wing

Company: EP1

Address: 1180 NW Maple St, Ste 310

City, State, ZIP: Issaquah, WA 98027

Phone: (425) 395-0010 Email: inom@epi-wa.com
betsyw@epi-wa.com

SAMPLERS (signature) <u>Betsy Wing</u>		PO # <u>74001</u>
PROJECT NAME <u>Brookdale</u>		INVOICE TO <u>Chije USA</u>
REMARKS		

TURNAROUND TIME
☐ Standard Turnaround
☐ RUSH 10 day TAT
 Rush charges authorized by: _____

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Archive Samples
☐ Other _____

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081 (Dieldrin)	method 8081 (Full Suite)		
A01-33-SW-5-1	21	7/10/19	1019	soil	1							X				
A01-33-SW-6-1	22		1025									X				
Dup-68	23											X				
Dup-69	24											X				
Dup-70	25											X				
A01-33-SW-7-1	26		1031									X				
A01-33-B-1-2	27		1103									X				
A01-33-B-1-3	28		1107									X				Met
A01-33-B-2-2	29		1111									X				
A01-33-B-2-3	30		1115													Hold

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

Relinquished by: <u>Betsy Wing</u>	PRINT NAME <u>Betsy Wing</u>	COMPANY <u>EP1</u>	DATE <u>7/11/19</u>	TIME <u>0600</u>
Received by: <u>Michael C. Lind</u>				
Relinquished by:				
Received by:				

Samples received at 2:00

907171

SAMPLE CHAIN OF CUSTODY

ME 07-11-19

704 4' of 8

Report To: Theresa Maria, Betsy Wing

Company: EP1

Address: 1180 NW Maple St, Ste 310

City, State, ZIP: Issaquah, WA 98027

Phone: (206) 395-0010 Email: Theresa.Maria@epi-wa.com

Dequise@epi-wa.com

SAMPLERS (Signature) <u>Theresa Maria</u>		PO # <u>74001</u>
PROJECT NAME <u>Brookdale</u>		INVOICE TO <u>Idigo USF</u>
REMARKS		

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround	
<input type="checkbox"/> RUSH 10 day	<u>14T</u>
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	
<input checked="" type="checkbox"/> Archive Samples	
<input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 (Diekhzin)	Method 8081 (Full Suite)		
A01-33-B-3:2	31	7/10/19	1123	Soil											X	HOLD
A01-33-B-3:3	32		1127												X	HOLD
A01-33-B-4:1	33		1126												X	HOLD
A01-33-B-4:2	34		1130												X	HOLD
A01-33-B-5:1.5	35		1132												X	HOLD
A01-33-B-5:2.5	36		1134												X	HOLD
A01-33-B-6:2	37		1133												X	HOLD
A01-33-B-6:3			113													
A01-33-B-7:1	38	7/10/19	1136	Soil											X	
A01-33-B-6:3	39		1137													HOLD

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
<u>Theresa Maria</u>		<u>Betsy Wing</u>		<u>EP1</u>		<u>7/11/19</u>	<u>0600</u>
Received by:		<u>Michael E. L.</u>		<u>T.B.S.</u>		<u>1</u>	<u>1</u>
Relinquished by:							
Received by:				Samples received at		<u>2</u>	<u>00</u>

907171

SAMPLE CHAIN OF CUSTODY

ME 07-11-19

7/11/19 5:08

Report To: Thom Martin, Betsy WineCompany: EP1Address: 1180 NW Maple St, Ste 310City, State, ZIP: Issaquah, WA 98027Phone: (425) 395-1000 Email: thom@epi-wa.com
betsy@epi-wa.com

SAMPLERS (Signature)		PO #
<u>Thom Martin</u>		74001
PROJECT NAME		INVOICE TO
<u>Brookdale</u>		1610 USA
REMARKS		

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH 10 day 14T Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other	

ANALYSES REQUESTED												Notes					
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D		PAHs 8270D SIM	method 8081 (Dieldrin)	method 8081 (Full Stock)	Dieldrin PCBs	7/11/19
A01-33-B-8:1	40	7/10/19	1138	Soil	1									X			
A01-33-B-8:2	41		1140		1												HOLD
A01-33-B-8:2	42		1142		1												HOLD
A01-33-B-9:2	43		1145		1									X			
A01-33-B-9:3	44		1149		1									X			HOLD
A01-33-B-10:1	45		1150		1									X			
A01-33-B-10:2	46		1154		1												HOLD
A01-33-B-11:2	47		1155		1									X			
040-71	48		—		1									X			
A01-33-B-12:1.5	49		1156		1									X			

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>Betsy Wine</u>	Betsy Wine	EP1	7/11/19	06:09
Received by:	Michael Clark	F18m		
Received by:				

907171

SAMPLE CHAIN OF CUSTODY ME 07-11-19

4704

Report To Thom Mason, Betsy Wing
Company EPI

Address 180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email thom@epi-wa.com
betsy@epi-wa.com

SAMPLERS (signature) <u>Betsy Wing</u>		PO #
PROJECT NAME <u>Brookdale</u>		74601
REMARKS	INVOICE TO <u>Ichijo USA</u>	

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH 10 day <u>141</u> Rush charges authorized by:	
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM method 8081 (Prelim) method 8081 (Full suite)	
101-33-B-11:3	50		1159										1700
101-33-B-12:2.5	51		1200										1700
101-34-SW-1:0.5	52		1223									X	
101-34-SW-2:1229	53		1229										
101-34-SW-2:0.5	53		1229									X	
101-34-SW-3:0.5	54		1233									X	
101-34-SW-4:0.5	55		1241										
101-34-	56		1240										
101-34-B-1:1	55		1236									X	
101-34-B-1:2	56		1240									X	1700

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
<u>Betsy Wing</u>		<u>Betsy Wing</u>		<u>EPI</u>		<u>7/11/19</u>	<u>0605</u>
Received by:		<u>Michael E. C. C.</u>		<u>FWS</u>		<u>*</u>	<u>1</u>
Relinquished by:							
Received by:							
				Samples received at		<u>3</u>	

Friedman & Briya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8382

907171

SAMPLE CHAIN OF CUSTODY ME 07-11-19

Page # 7 of 8

Report To Thom Moran, Betsy Wing
Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0000 Email betsy.wing@epi-wa.com

SAMPLERS (signature) <u>Betsy Wing</u>		PO #
PROJECT NAME <u>Brookdale</u>	INVOICE TO <u>1cuj> USA</u>	

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround	<input checked="" type="checkbox"/> RUSH 10 day TA
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	<input checked="" type="checkbox"/> Archive Samples
Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-34-SW-4:0.5	57	7/10/19	1241	Coil	1							Method 8061 (Prelim)	
A01-34-SW-2:1	58		1248		1							Method 8061 (Full Suite)	
A01-34-B-2:2	59		1252		1								HOLD
Dup-72	60												
A01-01-SW-10.5	61		1333										
A01-01-SW-2:0.5	62		1337										
A01-01-SW-3:0.5	63		1343										
A01-01-SW-4:0.5	64		1344										
A01-01-B-01:1	65		1330										
A01-01-B-1:2	66		1345										HOLD

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>Betsy Wing</u>	Betsy Wing	EPI	7/11/19	0600
<u>Michael E. ...</u>	Michael E. ...	Tib...		
Received by:				
Relinquished by:				
Received by:				

Samples received at 7:00

Friedman & Bryna, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

2-11

Page # 8 of 2

TURNAROUND TIME

☐ Standard Turnaround
☒ Rush 10 day / 14 I

☐ Standard Turnaround
☐ RUSH 10 day 14T
Rush charges authorized by:

☐ Dispose after 30 days

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

[illegible]

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Received by: <i>[Signature]</i>				
Received by: <i>[Signature]</i>	Betsy Wino	EPI	7/11/19	0603
Received by: <i>[Signature]</i>	Michael E. Lind	Fibre	6	6
Relinquished by:				
Received by:				
Samples received at <i>3</i>				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 31, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001

Dear Mr Morin:

Included is the amended report from the testing of material submitted on July 11, 2019 from the Brookdale 74001, F&BI 907171 project. Sample IDs AOI-33-B-3-2 and AOI-01-SW-1:0.5 have been corrected to AOI-33-B-3:2 and AOI-1-SW-1:0.5 respectively.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0729R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 29, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001

Dear Mr Morin:

Included are the results from the testing of material submitted on July 11, 2019 from the Brookdale 74001, F&BI 907171 project. There are 57 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0729R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 11, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907171 -01	AOI-32-SW-5:1
907171 -02	AOI-32-B-9:2
907171 -03	AOI-32-SW-6:1
907171 -04	AOI-32-B-9:3
907171 -05	AOI-32-B-10:1.5
907171 -06	AOI-32-B-10:2.5
907171 -07	AOI-32-B-11:2
907171 -08	AOI-32-B-11:3
907171 -09	AOI-32-B-12:2
907171 -10	AOI-32-B-13:1.5
907171 -11	AOI-32-B-12:3
907171 -12	AOI-32-B-13:2.5
907171 -13	AOI-32-B-14:1.5
907171 -14	AOI-32-B-14:2.5
907171 -15	AOI-32-B-15:1.5
907171 -16	AOI-32-B-15:2.5
907171 -17	AOI-33-SW-1:1
907171 -18	AOI-33-SW-2:1
907171 -19	AOI-33-SW-3:1
907171 -20	AOI-33-SW-4:1
907171 -21	AOI-33-SW-5:1
907171 -22	AOI-33-SW-6:1
907171 -23	DUP-68
907171 -24	DUP-69
907171 -25	DUP-70
907171 -26	AOI-33-SW-7:1
907171 -27	AOI-33-B-1:2
907171 -28	AOI-33-B-1:3
907171 -29	AOI-33-B-2:2
907171 -30	AOI-33-B-2:3
907171 -31	AOI-33-B-3:2
907171 -32	AOI-33-B-3:3
907171 -33	AOI-33-B-4:1
907171 -34	AOI-33-B-4:2
907171 -35	AOI-33-B-5:1.5
907171 -36	AOI-33-B-5:2.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907171 -37	AOI-33-B-6:2
907171 -38	AOI-33-B-7:1
907171 -39	AOI-33-B-6:3
907171 -40	AOI-33-B-8:1
907171 -41	AOI-33-B-7:2
907171 -42	AOI-33-B-8:2
907171 -43	AOI-33-B-9:2
907171 -44	AOI-33-B-9:3
907171 -45	AOI-33-B-10:1
907171 -46	AOI-33-B-10:2
907171 -47	AOI-33-B-11:2
907171 -48	DUP-71
907171 -49	AOI-33-B-12:1.5
907171 -50	AOI-33-B-11:3
907171 -51	AOI-33-B-12:2.5
907171 -52	AOI-34-SW-1:0.5
907171 -53	AOI-34-SW-2:0.5
907171 -54	AOI-34-SW-3:0.5
907171 -55	AOI-34-B-1:1
907171 -56	AOI-34-B-1:2
907171 -57	AOI-34-SW-4:0.5
907171 -58	AOI-34-B-2:1
907171 -59	AOI-34-B-2:2
907171 -60	DUP-72
907171 -61	AOI-1-SW-1:0.5
907171 -62	AOI-01-SW-2:0.5
907171 -63	AOI-01-SW-3:0.5
907171 -64	AOI-01-SW-4:0.5
907171 -65	AOI-01-B-1:1
907171 -66	AOI-01-B-1:2
907171 -67	DUP-73

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-SW-5:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-01 1/6
Date Analyzed:	07/16/19	Data File:	071633.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.027

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-B-9:2	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-02 1/6
Date Analyzed:	07/16/19	Data File:	071634.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	59	50	150
DBC	73	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.062

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-SW-6:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-03 1/6
Date Analyzed:	07/16/19	Data File:	071635.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-B-10:1.5	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-05 1/6
Date Analyzed:	07/16/19	Data File:	071636.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-B-11:2	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-07 1/6
Date Analyzed:	07/16/19	Data File:	071637.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.13

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-B-12:2	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/16/19	Lab ID:	907171-09 1/6
Date Analyzed:	07/19/19	Data File:	071918.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.080
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.23
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-B-13:1.5	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-10 1/60
Date Analyzed:	07/19/19	Data File:	071910.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68 d	50	150
DBC	78 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-B-14:1.5	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-13 1/6
Date Analyzed:	07/16/19	Data File:	071639.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.062

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-B-15:1.5	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-15 1/6
Date Analyzed:	07/16/19	Data File:	071640.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-1:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-17 1/6
Date Analyzed:	07/16/19	Data File:	071646.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-2:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-18 1/6
Date Analyzed:	07/16/19	Data File:	071647.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-3:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-19 1/6
Date Analyzed:	07/16/19	Data File:	071648.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-4:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-20 1/6
Date Analyzed:	07/17/19	Data File:	071649.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-5:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-21 1/6
Date Analyzed:	07/17/19	Data File:	071650.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.13

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-6:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-22 1/6
Date Analyzed:	07/17/19	Data File:	071651.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.014

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-68	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-23 1/6
Date Analyzed:	07/17/19	Data File:	071652.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.013

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-69	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-24 1/6
Date Analyzed:	07/17/19	Data File:	071653.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-70	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-25 1/6
Date Analyzed:	07/17/19	Data File:	071654.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-7:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-26 1/6
Date Analyzed:	07/17/19	Data File:	071655.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-B-1:2	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-27 1/6
Date Analyzed:	07/17/19	Data File:	071656.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.25

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-B-2:2	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/16/19	Lab ID:	907171-29 1/6
Date Analyzed:	07/19/19	Data File:	071919.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	0.011
delta-BHC	0.20
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.026
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-B-3:2	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/16/19	Lab ID:	907171-31 1/6
Date Analyzed:	07/19/19	Data File:	071920.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.12
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.10
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-B-4:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-33 1/6
Date Analyzed:	07/17/19	Data File:	071657.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.064

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-B-5:1.5	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-35 1/6
Date Analyzed:	07/17/19	Data File:	071658.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-B-6:2	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-37 1/6
Date Analyzed:	07/17/19	Data File:	071659.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-B-7:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-38 1/6
Date Analyzed:	07/17/19	Data File:	071709.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-B-8:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-40 1/6
Date Analyzed:	07/17/19	Data File:	071710.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.032

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-B-9:2	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-43 1/6
Date Analyzed:	07/17/19	Data File:	071711.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.57

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-B-10:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-45 1/6
Date Analyzed:	07/17/19	Data File:	071712.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-B-11:2	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-47 1/6
Date Analyzed:	07/17/19	Data File:	071713.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.24

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-71	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-48 1/6
Date Analyzed:	07/18/19	Data File:	071807.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-B-12:1.5	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-49 1/6
Date Analyzed:	07/17/19	Data File:	071714.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.030

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-SW-1:0.5	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-52 1/60
Date Analyzed:	07/19/19	Data File:	071911.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71 d	50	150
DBC	77 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	2.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-SW-2:0.5	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-53 1/6
Date Analyzed:	07/17/19	Data File:	071716.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.063

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-SW-3:0.5	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-54 1/6
Date Analyzed:	07/17/19	Data File:	071717.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.094

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-B-1:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-55 1/60
Date Analyzed:	07/19/19	Data File:	071912.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69 d	50	150
DBC	74 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.83

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-SW-4:0.5	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/16/19	Lab ID:	907171-57 1/6
Date Analyzed:	07/19/19	Data File:	071921.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.027
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-B-2:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-58 1/6
Date Analyzed:	07/17/19	Data File:	071719.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.19

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-72	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-60 1/6
Date Analyzed:	07/17/19	Data File:	071720.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	58	50	150
DBC	69	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.022

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-1-SW-1:0.5	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-61 1/6
Date Analyzed:	07/17/19	Data File:	071721.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.012

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-01-SW-2:0.5	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-62 1/6
Date Analyzed:	07/17/19	Data File:	071722.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	57	50	150
DBC	70	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-01-SW-3:0.5	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-63 1/6
Date Analyzed:	07/18/19	Data File:	071810.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-01-SW-4:0.5	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-64 1/6
Date Analyzed:	07/18/19	Data File:	071811.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.030

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-01-B-1:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-65 1/6
Date Analyzed:	07/18/19	Data File:	071812.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-73	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	907171-67 1/6
Date Analyzed:	07/18/19	Data File:	071813.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	09-1654 mb 1/6
Date Analyzed:	07/16/19	Data File:	071606.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/15/19	Lab ID:	09-1666 mb 1/6
Date Analyzed:	07/16/19	Data File:	071642.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/12/19	Lab ID:	09-1667 mb 1/6
Date Analyzed:	07/18/19	Data File:	071806.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 907171
Date Extracted:	07/16/19	Lab ID:	09-1674 mb 1/6
Date Analyzed:	07/19/19	Data File:	071908.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/29/19

Date Received: 07/11/19

Project: Brookdale 74001, F&BI 907171

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907148-58 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	76	78	45-130	3

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	94	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/29/19

Date Received: 07/11/19

Project: Brookdale 74001, F&BI 907171

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907171-17 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	81	76	45-130	6

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/29/19

Date Received: 07/11/19

Project: Brookdale 74001, F&BI 907171

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907171-49 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.027	107 b	94 b	45-130	13 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	86	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/29/19

Date Received: 07/11/19

Project: Brookdale 74001, F&BI 907171

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907196-32 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	<0.01	82	79	45-111	4
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	<0.01	88	84	50-117	5
beta-BHC	mg/kg (ppm)	0.1	<0.01	86	86	49-109	0
delta-BHC	mg/kg (ppm)	0.1	<0.01	86	87	39-114	1
Heptachlor	mg/kg (ppm)	0.1	<0.01	88	86	40-131	2
Aldrin	mg/kg (ppm)	0.1	<0.01	90	88	44-121	2
Heptachlor Epoxide	mg/kg (ppm)	0.1	<0.01	88	87	46-122	1
trans-Chlordane	mg/kg (ppm)	0.1	<0.01	85	85	41-129	0
cis-Chlordane	mg/kg (ppm)	0.1	<0.01	88	88	44-120	0
4,4'-DDE	mg/kg (ppm)	0.1	<0.01	87	87	50-150	0
Endosulfan I	mg/kg (ppm)	0.1	<0.01	86	86	45-124	0
Dieldrin	mg/kg (ppm)	0.1	<0.01	92	84	45-130	9
Endrin	mg/kg (ppm)	0.1	<0.01	99	99	50-140	0
4,4'-DDD	mg/kg (ppm)	0.1	<0.01	99	101	26-155	2
Endosulfan II	mg/kg (ppm)	0.1	<0.01	80	80	40-135	0
4,4'-DDT	mg/kg (ppm)	0.1	<0.01	71	71	50-150	0
Endrin Aldehyde	mg/kg (ppm)	0.1	<0.01	89	87	35-139	2
Methoxychlor	mg/kg (ppm)	0.1	<0.01	91	93	28-162	2
Endosulfan Sulfate	mg/kg (ppm)	0.1	<0.01	84	85	40-141	1
Endrin Ketone	mg/kg (ppm)	0.1	<0.01	86	87	41-147	1
Toxaphene	mg/kg (ppm)	4	<0.1	101	102	50-150	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/29/19

Date Received: 07/11/19

Project: Brookdale 74001, F&BI 907171

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
alpha-BHC	mg/kg (ppm)	0.1	91	56-113
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	94	58-120
beta-BHC	mg/kg (ppm)	0.1	93	70-130
delta-BHC	mg/kg (ppm)	0.1	99	70-130
Heptachlor	mg/kg (ppm)	0.1	95	56-124
Aldrin	mg/kg (ppm)	0.1	97	70-130
Heptachlor Epoxide	mg/kg (ppm)	0.1	95	70-130
trans-Chlordane	mg/kg (ppm)	0.1	93	60-123
cis-Chlordane	mg/kg (ppm)	0.1	97	70-130
4,4'-DDE	mg/kg (ppm)	0.1	95	70-130
Endosulfan I	mg/kg (ppm)	0.1	94	62-124
Dieldrin	mg/kg (ppm)	0.1	94	70-130
Endrin	mg/kg (ppm)	0.1	106	56-147
4,4'-DDD	mg/kg (ppm)	0.1	111	54-137
Endosulfan II	mg/kg (ppm)	0.1	87	42-140
4,4'-DDT	mg/kg (ppm)	0.1	76	25-169
Endrin Aldehyde	mg/kg (ppm)	0.1	99	21-135
Methoxychlor	mg/kg (ppm)	0.1	95	54-154
Endosulfan Sulfate	mg/kg (ppm)	0.1	92	39-148
Endrin Ketone	mg/kg (ppm)	0.1	95	46-134
Toxaphene	mg/kg (ppm)	4	111	56-145

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

ME 07-11-19

Page # 1 of 8

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 10 day 14T
 Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

Report To Thom Moran, Betsy Wing

Company EPI

Address 1180 NW Maple, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (206) 395-0010 Email thom.moran@epi-wa.com
betsy.wing@epi-wa.com

SAMPLERS (signature)
Betsy Wing

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO
14110 US4

ANALYSES REQUESTED

TPH-HCID
 TPH-Diesel
 TPH-Gasoline
 BTEX by 8021B
 VOCs by 8260C
 SVOCs by 8270D
 PAHs 8270D SIM
Method 8081 (field)
Method 8081 (Full Suite)

Notes

-per BW

7/30/19 ME

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 (field)	Method 8081 (Full Suite)	Notes
A01-32-SW-S:1	01	7/10/19	0835	soil	1								X		
A01-32-B-9:2	02		0840		1								X		
A01-32-SW-6:1	03		0845		1								X		
A01-32-B-9:3	04		0846		1										HOLD
A01-32-B-10:1.5	05		0854		1								X		
A01-32-B-10:2.5	06		0900		1										HOLD
A01-32-B-11:2	07		0906		1								X		
A01-32-B-11:3	08		0910		1										HOLD
A01-32-B-12:2	09		0915		1								X		
A01-32-B-13:1.5	10		0918		1								X		

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Received by:

Received by:

Received by:

Received by:

Received by:

Betsy Wing

Betsy Wing

Betsy Wing

Betsy Wing

Betsy Wing

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7/11/19

7/11/19

0604

0604

0604

0604

0604

Samples received at 300

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

907171

SAMPLE CHAIN OF CUSTODY ME 07-11-19

704 2 of 8

Report To: Thomson, Betsy Wing

Company: EP1

Address: 1180 NW Maple St, Ste 310

City, State, ZIP: Issaquah, WA 98027

Phone: (425) 395-1010 Email: thomson@epi-wa.com
Betsy Wing epi-wa.com

SAMPLES (signature) <u>Betsy Wing</u>		PO # <u>74001</u>
PROJECT NAME <u>Brookdale</u>		INVOICE TO <u>14110 VST</u>
REMARKS		

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround	<input checked="" type="checkbox"/> RUSH 10 DAY TAT
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	<input checked="" type="checkbox"/> Archive Samples
Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081 (Dieldrin)	method 8081 (Full Suite)		
A01-32-B-12:3	11	7/10/19	0919	Soil	1								<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		HOLD
A01-32-B-13:2.5	12		0922		1								<input checked="" type="checkbox"/>			HOLD
A01-32-B-14:1.5	13		0926		1								<input checked="" type="checkbox"/>			
A01-32-B-14:2.5	14		0930		1								<input checked="" type="checkbox"/>			HOLD
A01-32-B-15:1.5	15		0935		1								<input checked="" type="checkbox"/>			
A01-32-B-15:2.5	16		0939		1								<input checked="" type="checkbox"/>			HOLD
A01-33-SW-1:1	17		0955		1								<input checked="" type="checkbox"/>			
A01-33-SW-2:1	18		1001		1								<input checked="" type="checkbox"/>			
A01-33-SW-3:1	19		1007		1								<input checked="" type="checkbox"/>			
A01-33-SW-4:1	20		1013		1								<input checked="" type="checkbox"/>			

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
<u>Betsy Wing</u>		<u>Betsy Wing</u>		<u>EP1</u>		<u>7/11/19</u>	<u>0600</u>
Relinquished by:							
Received by:							

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

907171

SAMPLE CHAIN OF CUSTODY ME 07-11-19

Page # 3 of 8

Report To Inom Momin; Betsy Wing
 Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-6010 Email Inom Momin epi-wa.com
Betsy Wing epi-wa.com

SAMPLERS (signature)
Betsy Wing
 PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

Chije USA

TURNAROUND TIME

☐ Standard Turnaround
☐ RUSH 10 day T+T
 Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☐ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-33-SW-5:1	21	7/10/19	1019	soil	1								
A01-33-SW-6:1	22		1025		1								
Dup-68	23												
Dup-69	24												
Dup-70	25												
A01-33-SW-7:1	26		1031										
A01-33-B-1:2	27		1103										
A01-33-B-1:3	28		1107										
A01-33-B-2:2	29		1111										
A01-33-B-2:3	30		1115										

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Betsy Wing

Betsy Wing

EPI

7/11/19

0600

Received by:

Michael E. Lind

Michael E. Lind

F182

1

1

Relinquished by:

Received by:

Samples received at 5°C

Ph. (206) 285-3282

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Q57171

SAMPLE CHAIN OF CUSTODY

ME 07-11-19

704 4 8

Report To Theresa Maria, Betsy Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP SSaquah, WA 98027

Phone (253) 395-0010 Email Theresa@epi-wa.com
Betsy@epi-wa.com

SAMPLERS (signature) <u>Betsy Wing</u>		PO # <u>74001</u>
PROJECT NAME <u>Brookdale</u>		INVOICE TO <u>Idaho USA</u>
REMARKS		

TURNAROUND TIME Page # <u>4</u> of <u>8</u>	
SAMPLE DISPOSAL: <input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH 10 day 1st Rush charges authorized by: _____	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM method 8081 (Dieldrin) method 8081 (Full Suite)	
A01-33-B-3:2	31	7/10/19	1123	Soil								X	
A01-33-B-3:3	32		1127										hold
A01-33-B-4:1	33		1126									X	
A01-33-B-4:2	34		1130										hold
A01-33-B-5:1.5	35		1132									X	
A01-33-B-5:2.5	36		1134										hold
A01-33-B-6:2	37		1133									X	
A01-33-B-6:3			113										
A01-33-B-7:1	38	7/10/19	1136	Soil								X	
A01-33-B-6:3	39		1137										hold

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
<u>Betsy Wing</u>		<u>Betsy Wing</u>		<u>EP1</u>		<u>7/11/19</u>	<u>0600</u>
Relinquished by:		Relinquished by:		Relinquished by:			
Received by:		Received by:		Received by:			
				Samples received at		<u>20°C</u>	

907171

SAMPLE CHAIN OF CUSTODY ME 09-11-19

Page # 5 of 8

Report To Inom Motion, Betsy Wine
 Company EPI
 Address 1180 NW Maple St, Ste 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-1000 Email thommg@epi-wa.com
betsywine@epi-wa.com

SAMPLES (Signature) <u>Betsy Wine</u>		PO #
PROJECT NAME <u>Brookdale</u>		74001
REMARKS	INVOICE TO <u>ICUJO USA</u>	

<input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH 10 day 147 Rush charges authorized by:	TURNAROUND TIME 7/11/19
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other	

ANALYSES REQUESTED						Notes												
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars		TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081 (Dieldrin)	method 8081 (Full Suite)	Dieldrin per BW	7/11/19 ME	
A01-33-B-8:1	40	7/10/19	1138	Sci 1	1									X				HOLD
A01-33-B-7:2	41		1140		1													HOLD
A01-33-B-8:2	42		1142		1													HOLD
A01-33-B-9:2	43		1145		1									X				HOLD
A01-33-B-9:3	44		1149		1									X				HOLD
A01-33-B-10:1	45		1150		1									X				HOLD
A01-33-B-10:2	46		1154		1													HOLD
A01-33-B-11:2	47		1155		1									X				HOLD
040-71	48				1									X				
A01-33-B-12:1.5	49		1156		1									X				

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
<u>Betsy Wine</u>		<u>Betsy Wine</u>		<u>EPI</u>		<u>7/11/19</u>	<u>0609</u>
<u>Michael L. LRD</u>		<u>Michael L. LRD</u>		<u>F18m</u>		<u>L</u>	<u>L</u>
Received by:							

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

907171

SAMPLE CHAIN OF CUSTODY ME 07-11-19

Page # 6 of 8

Report To Thom Moran, Betsy Wing
 Company EPI
 Address 180 NW Maple St, Ste 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-1010 Email thom@epi-wa.com
Betsy Wing

SAMPLES (Signature) <u>Betsy Wing</u>		PO #
PROJECT NAME		74001
REMARKS	INVOICE TO	
Brookdale	Leije USA	

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH 10 day TAT Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other
--	--

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM method 8081 (Dielskin) method 8081 (Full Suite)	
101-33-B-11:3	50		1159										Hold
101-33-B-12:2.5	51		1200										Hold
101-34-SW-1:0.5	53		1223									X	
101-34-SW-2:1229													
101-34-SW-2:0.5	53		1229									X	
101-34-SW-3:0.5	54		1233									X	
101-34-SW-4:0.5													
101-34-SW-4:0.5													
101-34-B-1:1	55		1236									X	
101-34-B-1:2	56		1240									X	Hold

SIGNATURE <u>Betsy Wing</u>		PRINT NAME		COMPANY		DATE	TIME
Received by: <u>Betsy Wing</u>		Betsy Wing		EPI		7/11/19	0900
Relinquished by: <u>Michael E. ...</u>		Michael E. ...		EPI		*	1
Received by:							

3

907171

SAMPLE CHAIN OF CUSTODY NE 07-11-19

7/11/19

Page # 7 of 8

Report To Thom Martin, Betsy WingCompany ERIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0000 Email betsyw@epi-wa.comName Thom

SAMPLERS (signature) <u>Betsy Wing</u>		PO #
PROJECT NAME <u>Brookdale</u>		INVOICE TO <u>Idij's USA</u>

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround	<input type="checkbox"/> RUSH <u>10 day TA</u>
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	<input checked="" type="checkbox"/> Archive Samples
<input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED								Notes	
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081 (Preldrain)		method 8081 (Full Suite)
A01-34-SW-4:0.5	57	7/10/19	1241	Soil	1									X	
A01-34-SW-2:1	58		1248		1								X		
A01-34-B-2:2	59		1252												HOLD
Dup-72	60		—										X		
A01-01-SW-10:5	61		1333										X		
A01-01-SW-2:0.5	62		1337										X		
A01-01-SW-3:0.5	63		1343										X		
A01-01-SW-4:0.5	64		1344										X		
A01-01-B-01:1	65		1330										X		
A01-01-B-1:2	66	✓	1346	✓	✓										HOLD

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Requested by: <u>Betsy Wing</u>	PRINT NAME <u>Betsy Wing</u>	COMPANY <u>ERI</u>	DATE <u>7/11/19</u>	TIME <u>0600</u>
Received by: <u>Thom</u>	<u>Thom</u>	<u>ERI</u>	<u>7/11/19</u>	<u>12</u>
Relinquished by:				
Received by:				

Samples received at 7:00

Page # 8 of 8

PO#

74001

INVOICE TO

10/10/08

☐ Standard Turnaround
☐ RUSH *10 day 7-11*
Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

ANALYSES REQUESTED

[illegible]

Ph. (206) 285-8282

TIME

Received by:

.....

1

Samples received at 2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 8, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 907196

Dear Mr Morin:

Included are the additional results from the testing of material submitted on July 11, 2019 from the Brookdale 74001, F&BI 907196 project. There are 11 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0808R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 11, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 907196 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907196 -01	DUP-74
907196 -02	AOI-35-SW-1:1
907196 -03	AOI-35-SW-2:1
907196 -04	AOI-35-SW-3:1
907196 -05	AOI-35-SW-4:1
907196 -06	AOI-35-SW-5:0.75
907196 -07	AOI-35-SW-6:1
907196 -08	AOI-35-B-1:2
907196 -09	AOI-35-B-1:3
907196 -10	AOI-35-B-2:1
907196 -11	AOI-35-B-2:2
907196 -12	AOI-35-B-3:1.5
907196 -13	AOI-35-B-3:2.5
907196 -14	AOI-35-B-4:1
907196 -15	AOI-35-B-4:2
907196 -16	AOI-35-B-5:2
907196 -17	AOI-35-B-5:3
907196 -18	AOI-35-B-6:1.5
907196 -19	AOI-35-B-6:2.5
907196 -20	DUP-75
907196 -21	AOI-35-B-7:1.5
907196 -22	AOI-35-B-8:2
907196 -23	AOI-35-B-8:3
907196 -24	AOI-35-B-7:2.5
907196 -25	AOI-35-B-9:2
907196 -26	AOI-35-B-9:3
907196 -27	AOI-35-B-10:2
907196 -28	AOI-35-B-10:3
907196 -29	AOI-36-SW-1:0.5
907196 -30	AOI-36-SW-2:0.5
907196 -31	AOI-36-SW-3:1
907196 -32	AOI-36-SW-4:1
907196 -33	AOI-36-SW-5:0.25
907196 -34	AOI-36-B-1:2
907196 -35	AOI-36-B-1:3
907196 -36	AOI-36-B-2:1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907196 -37	AOI-36-B-3:1
907196 -38	AOI-36-B-2:2
907196 -39	AOI-36-B-3:2
907196 -40	AOI-36-B-4:2
907196 -41	AOI-36-B-4:3
907196 -42	DUP-76
907196 -43	AOI-36-B-5:1.5
907196 -44	AOI-36-B-5:2.5
907196 -45	AOI-36-B-6:2
907196 -46	AOI-36-B-6:3

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-1:3	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	08/02/19	Lab ID:	907196-09 1/6
Date Analyzed:	08/02/19	Data File:	080222.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-5:3	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	08/02/19	Lab ID:	907196-17 1/6
Date Analyzed:	08/02/19	Data File:	080223.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.053

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-6:2.5	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	08/02/19	Lab ID:	907196-19 1/6
Date Analyzed:	08/02/19	Data File:	080224.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-8:3	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	08/02/19	Lab ID:	907196-23 1/6
Date Analyzed:	08/02/19	Data File:	080225.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.055

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-9:3	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	08/02/19	Lab ID:	907196-26 1/6
Date Analyzed:	08/02/19	Data File:	080226.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.051

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-10:3	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	08/02/19	Lab ID:	907196-28 1/6
Date Analyzed:	08/02/19	Data File:	080227.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	90	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	08/02/19	Lab ID:	09-1900 mb 1/6
Date Analyzed:	08/03/19	Data File:	080318.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/08/19

Date Received: 07/11/19

Project: Brookdale 74001, F&BI 907196

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907586-19 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	68	69	45-130	1

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	89	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

907196

SAMPLE CHAIN OF CUSTODY

ME 07-11-19

404

Report To Thom Moran, Betsy WingCompany EP1Address 1180 NW Maple St. Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email thom.m@epi-wa.com
betsy.wing@epi-wa.com

SAMPLERS (signature) <u>Rebecca Becerra</u>		PO # <u>74001</u>
PROJECT NAME <u>Brookdale</u>		INVOICE TO <u>1chijie USA</u>
REMARKS		

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH 10 day TAT Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other
---	--

						ANALYSES REQUESTED								Notes
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM		
DWP-74	01	7/11/19	—	Soil	1							Method 8081- Dieldrin		
A01-35-SW-1:1	02		1030		1							Method 8081- Full Site		
A01-35-SW-2:1	03		1038		1									
A01-35-SW-3:1	04		1043		1									
A01-35-SW-4:1	05		1049		1									
A01-35-SW-5:0.75	06		1051		1									
A01-35-SW-6:1	07		1054		1									
A01-35-B-1:2	08		1101		1									
A01-35-B-1:3	09		1102		1									
A01-35-B-2:1	10		1110		1									

°C

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Rebecca Becerra</u>	<u>Rebecca Becerra</u>	<u>EP1</u>	<u>7/11/19</u>	<u>1700</u>
Received by: <u>Michael C</u>	<u>Michael C</u>	<u>EP1</u>	<u>7/11/19</u>	<u>1700</u>
Relinquished by:				
Received by:				

907196

SAMPLE CHAIN OF CUSTODY

ME 07-11-19

Page # 2 of 5

1107

Report To Thom Morn, Betsy WingCompany EPIAddress 1180 NW Maple St. Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email thom@epi-wa.com
betsy@epi-wa.com

SAMPLES (signature) <u>Rebecca Becerra</u>		TURNAROUND TIME	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001</u>	<input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH 10 day TAT Rush charges authorized by:	
REMARKS	INVOICE TO <u>EX 10410 USA</u>	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other	

						ANALYSES REQUESTED										Notes
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	method 8081-Dieldrin	method 8081-Full Suite		
A01-35-B-2:2	11	7/11/19	1111	Soil	1								X			HOLD
A01-35-B-3:1.5	13		1115										X			
A01-35-B-3:2.5	13		1117										X			HOLD
A01-35-B-4:1	14		1118										X			
A01-35-B-4:2	15		1119													HOLD
A01-35-B-5:2	16		1122										X			
A01-35-B-5:3	17		1125										X			HOLD
A01-35-B-6:1.5	18		1126										X			
A01-35-B-6:2.5	19		1128										X			HOLD
DWP-75	20												X			

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Pl. (206) 285-8282

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <u>Rebecca Becerra</u>		Rebecca Becerra		EPI		7/11/19	1700
Received by: <u>Michael E. Li</u>		Michael E. Li		Fib		7/11/19	1700
Relinquished by:							
Received by:							

907196

SAMPLE CHAIN OF CUSTODY

ME 07-11-19

404

Page # 3 of 5

Report To Thom Martin, Betsy Wing
 Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-1000 Email thommm@epi-wa.com
res@epi-wa.com

SAMPLERS (signature) <u>Rebecca Becerra</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001</u>
REMARKS	INVOICE TO <u>Wing USA</u>

TURNAROUND TIME <u>Standard Turnaround</u> <u>CRUSH 10 day 1st</u>
Rush charges authorized by: _____
SAMPLE DISPOSAL <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-35-B-7-1.5	21	7/11/19	1203	soil	1							<input checked="" type="checkbox"/> Method 8081- Delgren Method 8081- Full Suite	
A01-35-B-8-2	22		1204		1							<input checked="" type="checkbox"/>	HOLD
A01-35-B-8-3	23		1205		1							<input checked="" type="checkbox"/>	HOLD
A01-35-B-7-2.5	24		1206										HOLD
A01-35-B-9-2	25		1215									<input checked="" type="checkbox"/>	
A01-35-B-9-3	26		1219									<input checked="" type="checkbox"/>	HOLD
A01-35-B-10-2	27		1223									<input checked="" type="checkbox"/>	
A01-35-B-10-3	28		1227									<input checked="" type="checkbox"/>	HOLD
A01-36-SW-1-0.5	29		1239									<input checked="" type="checkbox"/>	
A01-36-SW-2-0.5	30		1245									<input checked="" type="checkbox"/>	

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <u>Rebecca Becerra</u>		<u>Rebecca Becerra</u>		<u>EPI</u>		7/11/19	1700
Received by: <u>Michael L. Ellis</u>		<u>Michael L. Ellis</u>		<u>Fish</u>		7/11/19	1700
Relinquished by:							
Received by:							

Friedman & Bruya, Inc.

301 E 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

907196

SAMPLE CHAIN OF CUSTODY ME 07-11-19

Page # 4 of 5

Report To Thom Morin; Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone 425-395-2010 Email thom@ep1-wa.com

Betsy@ep1-wa.com

SAMPLERS (signature) Rebecca Becerra

PROJECT NAME

BrookdalePO # 740011

REMARKS

INVOICE TO Idiyo USA

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 10 day AT
 Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081-Dieldrin	Method 8081-Full Suite	Notes
A01-36-SW-3:1	31	7/11/19	1250	Soil	1								X		
A01-36-SW-4:1	32		1254		1								X		
A01-36-SW-5:0.25	33		1259										X		
A01-36-B-1:2	34		1307										X		HOLD
A01-36-B-1:3	35		1309												
A01-36-B-2:1	36		1310										X		
A01-36-B-3:1	37		1311										X		
A01-36-B-2:2	38		1313												HOLD
A01-36-B-3:2	39		1314												HOLD
A01-36-B-4:2	40		1315											X	

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by:

Rebecca BecerraPRINT NAME Rebecca BecerraCOMPANY EP1DATE 7/11/19 TIME 1700

Received by:

Relinquished by:

Michael Lelli

FIRN

DATE 7/11/19 TIME 1700

Received by:

of _____

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 10 day THAT
Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

ANALYSES REQUESTED

[illegible]

Friedman & Bryca, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>Rebecca Becerra</i>	REBECA BECERRA	EPL	7/11/19	1700
Received by: <i>Michael</i>	Michael E-LA	Fish	7/11/19	1700
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 31, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 907196

Dear Mr Morin:

Included are the results from the testing of material submitted on July 11, 2019 from the Brookdale 74001, F&BI 907196 project. There are 38 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0731R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 11, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 907196 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907196 -01	DUP-74
907196 -02	AOI-35-SW-1:1
907196 -03	AOI-35-SW-2:1
907196 -04	AOI-35-SW-3:1
907196 -05	AOI-35-SW-4:1
907196 -06	AOI-35-SW-5:0.75
907196 -07	AOI-35-SW-6:1
907196 -08	AOI-35-B-1:2
907196 -09	AOI-35-B-1:3
907196 -10	AOI-35-B-2:1
907196 -11	AOI-35-B-2:2
907196 -12	AOI-35-B-3:1.5
907196 -13	AOI-35-B-3:2.5
907196 -14	AOI-35-B-4:1
907196 -15	AOI-35-B-4:2
907196 -16	AOI-35-B-5:2
907196 -17	AOI-35-B-5:3
907196 -18	AOI-35-B-6:1.5
907196 -19	AOI-35-B-6:2.5
907196 -20	DUP-75
907196 -21	AOI-35-B-7:1.5
907196 -22	AOI-35-B-8:2
907196 -23	AOI-35-B-8:3
907196 -24	AOI-35-B-7:2.5
907196 -25	AOI-35-B-9:2
907196 -26	AOI-35-B-9:3
907196 -27	AOI-35-B-10:2
907196 -28	AOI-35-B-10:3
907196 -29	AOI-36-SW-1:0.5
907196 -30	AOI-36-SW-2:0.5
907196 -31	AOI-36-SW-3:1
907196 -32	AOI-36-SW-4:1
907196 -33	AOI-36-SW-5:0.25
907196 -34	AOI-36-B-1:2
907196 -35	AOI-36-B-1:3
907196 -36	AOI-36-B-2:1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907196 -37	AOI-36-B-3:1
907196 -38	AOI-36-B-2:2
907196 -39	AOI-36-B-3:2
907196 -40	AOI-36-B-4:2
907196 -41	AOI-36-B-4:3
907196 -42	DUP-76
907196 -43	AOI-36-B-5:1.5
907196 -44	AOI-36-B-5:2.5
907196 -45	AOI-36-B-6:2
907196 -46	AOI-36-B-6:3

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-74	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-01 1/6
Date Analyzed:	07/18/19	Data File:	071830.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.016

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-1:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/12/19	Lab ID:	907196-02 1/6
Date Analyzed:	07/18/19	Data File:	071817.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.017

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-2:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-03 1/6
Date Analyzed:	07/19/19	Data File:	071917.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-3:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/12/19	Lab ID:	907196-04 1/6
Date Analyzed:	07/18/19	Data File:	071818.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.024

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-4:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/12/19	Lab ID:	907196-05 1/6
Date Analyzed:	07/18/19	Data File:	071819.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.013

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-5:0.75	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/12/19	Lab ID:	907196-06 1/6
Date Analyzed:	07/18/19	Data File:	071820.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.019

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-6:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/12/19	Lab ID:	907196-07 1/6
Date Analyzed:	07/18/19	Data File:	071821.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.26

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-1:2	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/12/19	Lab ID:	907196-08 1/6
Date Analyzed:	07/18/19	Data File:	071822.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.063

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-2:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-10 1/6
Date Analyzed:	07/18/19	Data File:	071841.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-3:1.5	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-12 1/6
Date Analyzed:	07/18/19	Data File:	071842.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-4:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-14 1/6
Date Analyzed:	07/18/19	Data File:	071833.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.039

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-5:2	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-16 1/6
Date Analyzed:	07/18/19	Data File:	071834.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-6:1.5	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-18 1/6
Date Analyzed:	07/18/19	Data File:	071835.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-75	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-20 1/6
Date Analyzed:	07/18/19	Data File:	071836.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.52

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-7:1.5	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-21 1/6
Date Analyzed:	07/18/19	Data File:	071837.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.019

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-8:2	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-22 1/60
Date Analyzed:	07/23/19	Data File:	072314.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75 d	50	150
DBC	83 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-9:2	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-25 1/120
Date Analyzed:	07/23/19	Data File:	072315.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	58 d	50	150
DBC	68 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	3.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-10:2	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-27 1/6
Date Analyzed:	07/23/19	Data File:	072316.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.22

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-SW-1:0.5	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-29 1/6
Date Analyzed:	07/18/19	Data File:	071844.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-SW-2:0.5	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-30 1/60
Date Analyzed:	07/23/19	Data File:	072317.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75 d	50	150
DBC	84 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-SW-3:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-31 1/6
Date Analyzed:	07/18/19	Data File:	071846.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-SW-4:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-32 1/6
Date Analyzed:	07/19/19	Data File:	071851.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-SW-5:0.25	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-33 1/6
Date Analyzed:	07/19/19	Data File:	071852.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.092

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-B-1:2	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-34 1/6
Date Analyzed:	07/19/19	Data File:	071853.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-B-2:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-36 1/6
Date Analyzed:	07/19/19	Data File:	071854.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.058

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-B-3:1	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-37 1/6
Date Analyzed:	07/19/19	Data File:	071855.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-B-4:2	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-40 1/6
Date Analyzed:	07/19/19	Data File:	071916.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-76	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-42 1/6
Date Analyzed:	07/19/19	Data File:	071856.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.010

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-B-5:1.5	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-43 1/6
Date Analyzed:	07/19/19	Data File:	071857.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-B-6:2	Client:	Environmental Partners
Date Received:	07/11/19	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	907196-45 1/6
Date Analyzed:	07/19/19	Data File:	071858.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	09-1673 mb 1/6
Date Analyzed:	07/18/19	Data File:	071828.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 907196
Date Extracted:	07/16/19	Lab ID:	09-1674 mb 1/6
Date Analyzed:	07/19/19	Data File:	071908.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/31/19

Date Received: 07/11/19

Project: Brookdale 74001, F&BI 907196

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 907196-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.015	87	83	45-130	5

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/31/19

Date Received: 07/11/19

Project: Brookdale 74001, F&BI 907196

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR ORGANOCHLORINE PESTICIDES BY EPA METHOD 8081B

Laboratory Code: 907196-32 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	<0.01	82	79	45-111	4
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	<0.01	88	84	50-117	5
beta-BHC	mg/kg (ppm)	0.1	<0.01	86	86	49-109	0
delta-BHC	mg/kg (ppm)	0.1	<0.01	86	87	39-114	1
Heptachlor	mg/kg (ppm)	0.1	<0.01	88	86	40-131	2
Aldrin	mg/kg (ppm)	0.1	<0.01	90	88	44-121	2
Heptachlor Epoxide	mg/kg (ppm)	0.1	<0.01	88	87	46-122	1
trans-Chlordane	mg/kg (ppm)	0.1	<0.01	85	85	41-129	0
cis-Chlordane	mg/kg (ppm)	0.1	<0.01	88	88	44-120	0
4,4'-DDE	mg/kg (ppm)	0.1	<0.01	87	87	50-150	0
Endosulfan I	mg/kg (ppm)	0.1	<0.01	86	86	45-124	0
Dieldrin	mg/kg (ppm)	0.1	<0.01	92	84	45-130	9
Endrin	mg/kg (ppm)	0.1	<0.01	99	99	50-140	0
4,4'-DDD	mg/kg (ppm)	0.1	<0.01	99	101	26-155	2
Endosulfan II	mg/kg (ppm)	0.1	<0.01	80	80	40-135	0
4,4'-DDT	mg/kg (ppm)	0.1	<0.01	71	71	50-150	0
Endrin Aldehyde	mg/kg (ppm)	0.1	<0.01	89	87	35-139	2
Methoxychlor	mg/kg (ppm)	0.1	<0.01	91	93	28-162	2
Endosulfan Sulfate	mg/kg (ppm)	0.1	<0.01	84	85	40-141	1
Endrin Ketone	mg/kg (ppm)	0.1	<0.01	86	87	41-147	1
Toxaphene	mg/kg (ppm)	4	<0.1	101	102	50-150	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/31/19

Date Received: 07/11/19

Project: Brookdale 74001, F&BI 907196

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
alpha-BHC	mg/kg (ppm)	0.1	91	56-113
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	94	58-120
beta-BHC	mg/kg (ppm)	0.1	93	70-130
delta-BHC	mg/kg (ppm)	0.1	99	70-130
Heptachlor	mg/kg (ppm)	0.1	95	56-124
Aldrin	mg/kg (ppm)	0.1	97	70-130
Heptachlor Epoxide	mg/kg (ppm)	0.1	95	70-130
trans-Chlordane	mg/kg (ppm)	0.1	93	60-123
cis-Chlordane	mg/kg (ppm)	0.1	97	70-130
4,4'-DDE	mg/kg (ppm)	0.1	95	70-130
Endosulfan I	mg/kg (ppm)	0.1	94	62-124
Dieldrin	mg/kg (ppm)	0.1	94	70-130
Endrin	mg/kg (ppm)	0.1	106	56-147
4,4'-DDD	mg/kg (ppm)	0.1	111	54-137
Endosulfan II	mg/kg (ppm)	0.1	87	42-140
4,4'-DDT	mg/kg (ppm)	0.1	76	25-169
Endrin Aldehyde	mg/kg (ppm)	0.1	99	21-135
Methoxychlor	mg/kg (ppm)	0.1	95	54-154
Endosulfan Sulfate	mg/kg (ppm)	0.1	92	39-148
Endrin Ketone	mg/kg (ppm)	0.1	95	46-134
Toxaphene	mg/kg (ppm)	4	111	56-145

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

907196

SAMPLE CHAIN OF CUSTODY

ME 07-11-19

404
of 5Report To Thom Morin, Petsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email thom.morin@epi-wa.com
petsy.wing@epi-wa.com

SAMPLERS (signature)

Rebecca Becerra

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

1chij's
USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 10 day TAT

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other _____

ANALYSES REQUESTED

TPH-HCID	
TPH-Diesel	
TPH-Gasoline	
BTEX by 8021B	
VOCs by 8260C	
SVOCs by 8270D	
PAHs 8270D SIM	
Method 8061- Diels Alder	
Method 8081- Full Suite	

Notes

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8061- Diels Alder	Method 8081- Full Suite	Notes
DWP-74	01	7/11/19	—	Soil	1								X		
A01-35-SW-1:1	02		1030		1								X		
A01-35-SW-2:1	03		1038		1									X	
A01-35-SW-3:1	04		1043		1								X		
A01-35-SW-4:1	05		1049		1								X		
A01-35-SW-5:0.75	06		1051		1								X		
A01-35-SW-6:1	07		1054		1								X		
A01-35-B-1:2	08		1101		1								X		
A01-35-B-1:3	09		1102		1										40LD
A01-35-B-2:1	10		1110		1								X		Samples received at 3

°C

SIGNATURE

Relinquished by:

Rebecca Becerra

PRINT NAME

Rebecca Becerra

COMPANY

EP1

DATE

7/11/19

TIME

1700Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029

Relinquished by:

Michael L. L. L.Michael L. L. L.F18m7/11/191700

Ph. (206) 285-8282

Received by:

Rebecca BecerraMichael L. L. L.F18m7/11/191700

907196

SAMPLE CHAIN OF CUSTODY

ME 07-11-19

Page # 2 of 5

1107
2
5

Report To Thom Morn, Betsy Wing

Company EPI

Address 1180 NW Maple St. Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email thom@epi-wa.com
betsy@epi-wa.com

SAMPLERS (signature) <u>Rebecca Becerra</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001</u>
REMARKS	INVOICE TO <u>EX 10410 USA</u>

TURNAROUND TIME <u>Standard Turnaround</u> <u>RUSH 10 day</u> <u>TAT</u>	
Rush charges authorized by:	
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-35-B-2:2	11	7/11/19	1111	Soil	1								HOLD
A01-35-B-3:1.5	13		1115		1							X	HOLD
A01-35-B-3:2.5	13		1117		1								HOLD
A01-35-B-4:1	14		1118		1							X	HOLD
A01-35-B-4:2	15		1119		1								HOLD
A01-35-B-5:2	16		1122		1							X	HOLD
A01-35-B-5:3	17		1125		1								HOLD
A01-35-B-6:1.5	18		1126		1							X	HOLD
A01-35-B-6:2.5	19		1128		1								HOLD
DUP-75	20											X	

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by:	<u>Rebecca Becerra</u>	<u>Rebecca Becerra</u>		<u>EPI</u>		<u>7/11/19</u>	<u>1700</u>		
Received by:	<u>Michael E. Li</u>	<u>Michael E. Li</u>		<u>Fiber</u>		<u>7/11/19</u>	<u>1700</u>		
Relinquished by:									
Received by:									

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

907196

SAMPLE CHAIN OF CUSTODY

ME 07-11-19

A04

Page # 3 of 5

Report To Thom Merrin, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0000 Email thomm@epi-wa.combesy@epi-wa.com

SAMPLERS (signature)

Rebecca Becerra

PROJECT NAME

Brookdale

PO #

74001

REMARKS

Invoice to Iwigo USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 10 day 14T

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other _____

ANALYSES REQUESTED

TPH-HCID
TPH-Diesel
TPH-Gasoline
BTEX by 8021B
VOCs by 8260C
SVOCs by 8270D
PAHs 8270D SIM
Method 8081- Dieldrin
Method 8081- Full Suite

Notes

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081- Dieldrin	Method 8081- Full Suite	Notes
A01-35-B-7:1.5	21	7/11/19	1203	Soil	1								X		
A01-35-B-8:2	22		1204		1								X		HOLD
A01-35-B-8:3	23		1205		1										HOLD
A01-35-B-7:2.5	24		1206		1										HOLD
A01-35-B-9:2	25		1215		1								X		
A01-35-B-9:3	26		1219		1										HOLD
A01-35-B-10:2	27		1223		1								X		
A01-35-B-10:3	28		1227		1										HOLD
A01-36-SW-1:0.5	29		1239		1								X		
A01-36-SW-2:0.5	30		1245		1								X		

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by:

Rebecca BecerraRebecca BecerraEPI7/11/191700

Relinquished by:

Michelle ZellFish7/11/191700

Received by:

Michelle ZellFish7/11/191700

907196

SAMPLE CHAIN OF CUSTODY ME 07-11-19

Page # 4 of 5

Report To Thom Monin; Betsy Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email thommon@epi-wa.com

BetsyWing@epi-wa.com

SAMPLERS (signature) Rebecca Becerra

PROJECT NAME

Brookdale

PO #

74001.1

REMARKS

INVOICE TO

14110
USA

TURNAROUND TIME
☐ Standard Turnaround
☒ RUSH 10 day 7/11
Rush charges authorized by:

SAMPLE DISPOSAL
☐ Dispose after 30 days
☒ Archive Samples
☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-36-SW-3:1	31	7/11/19	1250	Soil	1							<input checked="" type="checkbox"/> Method 8081-Distillation	
A01-36-SW-4:1	32		1254		1							<input checked="" type="checkbox"/> Method 8081-Full Suite	
A01-36-SW-5:0.25	33		1259		1							<input checked="" type="checkbox"/> Method 8081-Distillation	
A01-36-B-1:2	34		1307		1							<input checked="" type="checkbox"/> Method 8081-Distillation	HOLD
A01-36-B-1:3	35		1309		1							<input checked="" type="checkbox"/> Method 8081-Distillation	HOLD
A01-36-B-2:1	36		1310		1							<input checked="" type="checkbox"/> Method 8081-Distillation	
A01-36-B-3:1	37		1311		1							<input checked="" type="checkbox"/> Method 8081-Distillation	
A01-36-B-2:2	38		1313		1							<input checked="" type="checkbox"/> Method 8081-Distillation	HOLD
A01-36-B-3:2	39		1314		1							<input checked="" type="checkbox"/> Method 8081-Distillation	HOLD
A01-36-B-4:2	40		1315		1							<input checked="" type="checkbox"/> Method 8081-Distillation	

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by: Rebecca Becerra

Rebecca Becerra

EP1

7/11/19 1700

Received by: Michael

Michael

FIRN

7/11/19 1700



Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029

Ph. (206) 285-8282

Received by:

5

☐ Other _____

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	REBECA BECERRA	EPL	7/11/19	1700
Received by: 	Michelle Lech	Fish	7/11/19	1700
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 29, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 74001, F&BI 908228

Dear Mr Morin:

Included are the additional results from the testing of material submitted on August 13, 2019 from the 74001, F&BI 908228 project. There are 6 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0829R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 13, 2019 by Friedman & Bruya, Inc. from the Environmental Partners 74001, F&BI 908228 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
908228-01	AOI-3-SW-3:0.5
908228-02	AOI-3-B-1:1.6
908228-03	AOI-3-B-1:2.6
908228-04	AOI-3-SW-4:0.5
908228-05	AOI-3-SW-2:0.5
908228-06	AOI-3-SW-1:1.8
908228-07	AOI-2-B-5:2
908228-08	AOI-2-SW-6:1
908228-09	AOI-2-SW-7:1
908228-10	AOI-2-SW-8:1.5
908228-11	Dup-77
908228-12	AOI-4-SW-14:1
908228-13	AOI-4-SW-15:3
908228-14	AOI-4-SW-16:1
908228-15	AOI-4-SW-19:1
908228-16	AOI-4-SW-20:1
908228-17	AOI-4-B-24:2
908228-18	AOI-4-SW-21:0.8
908228-19	AOI-4-B-23:2
908228-20	AOI-4-SW-17:1
908228-21	Dup-78
908228-22	AOI-4-SW-22:2.5
908228-23	AOI-4-SW-24:2.5
908228-24	AOI-4-SW-23:2.5
908228-25	AOI-4-SW-18:0.5
908228-26	AOI-4-SW-25:2.5
908228-27	AOI-4-SW-27:3
908228-28	AOI-4-SW-28:3
908228-29	AOI-4-SW-26:3
908228-30	AOI-4-SW-29:3
908228-31	AOI-5-SW-6:0.5
908228-32	AOI-5-SW-7:1
908228-33	AOI-5-SW-8:1
908228-34	AOI-5-B-8:2
908228-35	AOI-5-SW-9:1
908228-36	AOI-5-SW-11:1.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
908228-37	AOI-5-B-9:3
908228-38	AOI-5-SW-13:0.8
908228-39	Dup-79
908228-40	Dup-80
908228-41	AOI-6-SW-8:3
908228-42	AOI-6-SW-9:3
908228-43	AOI-6-SW-10:3
908228-44	AOI-6-B-17:4
908228-45	AOI-6-B-18:4
908228-46	AOI-5-B-10:2
908228-47	AOI-4-B-30:2
908228-48	AOI-7-SW-9:0.9
908228-49	Dup-81
908228-50	AOI-7-SW-13:0.6
908228-51	AOI-7-SW-10:0.5
908228-52	AOI-7-SW-11:0.5
908228-53	Dup-82
908228-54	AOI-7-SW-12:0.9
908228-55	AOI-7-B-18:0.9
908228-56	AOI-7-B-17:0.8
908228-57	AOI-7-SW-14:1.3
908228-58	AOI-7-SW-15:0.5
908228-59	AOI-7-SW-16:0.5
908228-60	AOI-7-B-19:1

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-3-B-1:2.6	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/22/19	Lab ID:	908228-03 1/6
Date Analyzed:	08/28/19	Data File:	082748.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 908228
Date Extracted:	08/22/19	Lab ID:	09-2069 mb2 1/6
Date Analyzed:	08/28/19	Data File:	082747.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	88	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/29/19

Date Received: 08/13/19

Project: 74001, F&BI 908228

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908404-61 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	94	96	45-130	2

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	102	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

908228

SAMPLE CHAIN OF CUSTODY

MC 08-13-19

Page # 1 of 6

605

Report To Thom Marin, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WAPhone (425) 395-0111 Email thom@epi-wa.com
betsy@epi-wa.comSAMPLES (signature)
Betsy WingPROJECT NAME BrookdalePO # 74001

REMARKS

INVOICE TO

1010 USA

TURNAROUND TIME

Standard Turnaround
5 day
Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

TPH-HCID
TPH-Diesel
TPH-Gasoline
BTEX by 8021B
VOCs by 8260C
SVOCs by 8270D
PAHs 8270D SIM
Dieldrin method 8081
Endrin method 8081

Notes

- per BW
8/24/19 ME
HOLD

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Dieldrin method 8081	Endrin method 8081	Notes
A01-3-SW-3:0.5	01	08/12/19	0835	Soil	1										
A01-3-B-1:1.6	02		0836												
A01-3-B-1:2.6	03		0841												
A01-3-SW-4:0.5	04		0844												
A01-3-SW-2:0.5	05		0845												
A01-3-SW-1:1.8	06		0846												
A01-2-B-5:2	07		0906												
A01-2-SW-6:1	08		0909												
A01-2-SW-7:1	09		0911												
A01-2-SW-8:1.5	10		0916												

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Betsy Wing

EPI

8/13/19

0631

Relinquished by:

Michael E. ...

EPI

8/13/19

0631

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-6282

Received by:

Samples received at

4 °C

906228

SAMPLE CHAIN OF CUSTODY

ME 08-13-19

Page # 2 of 605

Report To Thom Munin, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email thom@epi.wa.comBetsy Wing

SAMPLES (signature) <u>Betsy Wing</u>	
PROJECT NAME	PO #
<u>Brookdale</u>	<u>74001</u>
REMARKS	INVOICE TO
	<u>Chico USA</u>

TURNAROUND TIME
<input checked="" type="checkbox"/> Standard Turnaround
<input checked="" type="checkbox"/> RUSH <u>5 day</u> <u>1st</u>
Rush charges authorized by:
SAMPLE DISPOSAL
<input type="checkbox"/> Dispose after 30 days
<input checked="" type="checkbox"/> Archive Samples
<input type="checkbox"/> Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM				
<u>DWP-77</u>	<u>11</u>	<u>08/12/19</u>	<u>—</u>	<u>Soil</u>	<u>1</u>							<u>Detected</u>				
<u>ADL-4-SW-14:1</u>	<u>12</u>		<u>0937</u>									<u>X</u>				
<u>ADL-4-SW-15:3</u>	<u>13</u>		<u>0938</u>									<u>X</u>				
<u>ADL-4-SW-16:1</u>	<u>14</u>		<u>0944</u>									<u>X</u>				
<u>ADL-4-SW-19:1</u>	<u>15</u>		<u>0942</u>									<u>X</u>				
<u>ADL-4-SW-20:1</u>	<u>16</u>		<u>0944</u>									<u>X</u>				
<u>ADL-4-B-24:2</u>	<u>17</u>		<u>0946</u>									<u>X</u>				
<u>ADL-4-SW-21:0.8</u>	<u>18</u>		<u>0950</u>									<u>X</u>				
<u>ADL-4-B-23:2</u>	<u>19</u>		<u>0954</u>									<u>X</u>				
<u>ADL-4-SW-17:1</u>	<u>20</u>	<u>↓</u>	<u>0950</u>	<u>↓</u>	<u>↓</u>							<u>X</u>				

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8382

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
<u>Betsy Wing</u>		<u>Betsy Wing</u>		<u>EPI</u>		<u>8/13/19</u>		<u>0631</u>	
Relinquished by:		Relinquished by:		Relinquished by:		Relinquished by:		Relinquished by:	
<u>Michael</u>		<u>Michael</u>		<u>Michael</u>		<u>Michael</u>		<u>Michael</u>	
Received by:		Received by:		Received by:		Received by:		Received by:	
				Samples received at		<u>4</u> °C			

SAMPLE CHAIN OF CUSTODY

Report To Thom Mann, Betsy Wing

Page # 4 of 6

Company EP1

Address 1180 NW Maple St. Ste 310

City, State, ZIP Bozeman, MT 59717

Phone (406) 395-8000 Email thommann@epi-wa.com

betsy.wing@epi-wa.com

SAMPLER'S Signature Michaela DeCene

PROJECT NAME

Brockdale

PO #

74001

REMARKS

INVOICE TO

ICM Inc
USA

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 5-day RT
Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

ANALYSES REQUESTED

TPH-HCID
TPH-Diesel
TPH-Gasoline
BTEX by 8021B
VOCs by 8260C
SVOCs by 8270D
PAHs 8270D SIM
Dieldrin - method 8081

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Dieldrin - method 8081	Notes
A01-5-SW-6:0.5	31	08/12/19	1109	Soil	1									
A01-5-SW-7:1	32		1113											
A01-5-SW-8:1	33		1116											
A01-5-B-8:2	34		1118											
A01-5-SW-9:1	35		1119											
A01-5-SW-11:1.5	36		1120											
A01-5-B-9:3	37		1125											
A01-5-SW-13:0.8	38		1126											
DUP-79	39													
DUP-80	40													

SIGNATURE

Relinquished by: Betsy Wing

PRINT NAME

Betsy Wing

COMPANY

EP1

DATE

8/13/19

TIME

0631

Received by: Michaela DeCene

PRINT NAME

Michaela DeCene

COMPANY

EP1

DATE

8/13/19

TIME

0631

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph: (206) 285-8282

Received by: _____

Samples received at

4

908228

SAMPLE CHAIN OF CUSTODY

ME 08-13-17

Page # 5 of 16

Report To Thom Marin, Betsy Wing

Company EP1

Address 180 NW Maple St Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (206) 335-0210 Email thommarin@epi-wa.com

betsy.wing@epi-wa.com

SAMPLERS (signature) <u>Doreen Breene</u>	
PROJECT NAME	PO #
<u>Brookdale</u>	
REMARKS	INVOICE TO
	<u>74001.1</u>
	<u>1chid</u>
	<u>USA</u>

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround	<input checked="" type="checkbox"/> Rush
Rush charges authorized by: <u>5 day 747</u>	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	<input checked="" type="checkbox"/> Archive Samples
<input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-b-SW-8:3	41	08/13/17	1143	soil	1								
A01-b-SW-9:3	42		1146		1								
A01-b-SW-10:3	43		1147		1								
A01-b-B-17:4	44		1148		1								
A01-b-B-18:4	45		1150		1								
A01-S-B-10:2	46		1214										
A01-4-B-30:2	47		1229										
A01-7-SW-9:0.9	48		1308										
SWP-81	49		—										
A01-7-SW-13:0.6	50		1309										

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Requisitioned by: <u>Betsy Wing</u>		Betsy Wing		EP1		08/13/15	0631
Received by: <u>Michael Lli</u>		Michael Lli		Fibm		1	↓
Requisitioned by:							
Received by:				Samples received at		4	00

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

708228

SAMPLE CHAIN OF CUSTODY

ME 08-13-19

Page # 6 of 6

Report To Thom Morin, Betsy Wing

Company EPI

Address 1180 NW Maple St Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (206) 235-0010 Email thom.morin@epi-wa.com
betsy.wing@epi-wa.com

SAMPLES (signature) <u>Robica Belawa</u>		PO #
PROJECT NAME	Brookdale	
REMARKS	74001	
INVOICE TO	14010	
DCA		

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround	<input checked="" type="checkbox"/> RUSH 5 day TAT
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	<input checked="" type="checkbox"/> Archive Samples
<input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes	
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Field method 8081				
A01-7-SW-10:0.5	51	08/12/19	1312	Soil	1												
A01-7-SW-11:0.5	52		1316														
DUP-82	53																
A01-7-SW-12:0.9	54		1317														
A01-7-B-18:0.9	55		1323														
A01-7-B-17:0.8	56		1324														
A01-7-SW-14:1.3	57		1326														
A01-7-SW-15:0.5	58		1328														
A01-7-SW-16:0.5	59		1331														
A01-7-B-19:1	60		1332														

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>Betsy Wing</u>		Betsy Wing		EPI		8/13/19		0631	
Received by: <u>Michael Hall</u>		Michael Hall		Fib.					
Relinquished by:									
Received by:				Samples received at		40C			

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph: (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 21, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 74001, F&BI 908228

Dear Mr Morin:

Included are the results from the testing of material submitted on August 13, 2019 from the 74001, F&BI 908228 project. There are 69 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0821R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 13, 2019 by Friedman & Bruya, Inc. from the Environmental Partners 74001, F&BI 908228 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
908228-01	AOI-3-SW-3:0.5
908228-02	AOI-3-B-1:1.6
908228-03	AOI-3-B-1:2.6
908228-04	AOI-3-SW-4:0.5
908228-05	AOI-3-SW-2:0.5
908228-06	AOI-3-SW-1:1.8
908228-07	AOI-2-B-5:2
908228-08	AOI-2-SW-6:1
908228-09	AOI-2-SW-7:1
908228-10	AOI-2-SW-8:1.5
908228-11	Dup-77
908228-12	AOI-4-SW-14:1
908228-13	AOI-4-SW-15:3
908228-14	AOI-4-SW-16:1
908228-15	AOI-4-SW-19:1
908228-16	AOI-4-SW-20:1
908228-17	AOI-4-B-24:2
908228-18	AOI-4-SW-21:0.8
908228-19	AOI-4-B-23:2
908228-20	AOI-4-SW-17:1
908228-21	Dup-78
908228-22	AOI-4-SW-22:2.5
908228-23	AOI-4-SW-24:2.5
908228-24	AOI-4-SW-23:2.5
908228-25	AOI-4-SW-18:0.5
908228-26	AOI-4-SW-25:2.5
908228-27	AOI-4-SW-27:3
908228-28	AOI-4-SW-28:3
908228-29	AOI-4-SW-26:3
908228-30	AOI-4-SW-29:3
908228-31	AOI-5-SW-6:0.5
908228-32	AOI-5-SW-7:1
908228-33	AOI-5-SW-8:1
908228-34	AOI-5-B-8:2
908228-35	AOI-5-SW-9:1
908228-36	AOI-5-SW-11:1.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
908228-37	AOI-5-B-9:3
908228-38	AOI-5-SW-13:0.8
908228-39	Dup-79
908228-40	Dup-80
908228-41	AOI-6-SW-8:3
908228-42	AOI-6-SW-9:3
908228-43	AOI-6-SW-10:3
908228-44	AOI-6-B-17:4
908228-45	AOI-6-B-18:4
908228-46	AOI-5-B-10:2
908228-47	AOI-4-B-30:2
908228-48	AOI-7-SW-9:0.9
908228-49	Dup-81
908228-50	AOI-7-SW-13:0.6
908228-51	AOI-7-SW-10:0.5
908228-52	AOI-7-SW-11:0.5
908228-53	Dup-82
908228-54	AOI-7-SW-12:0.9
908228-55	AOI-7-B-18:0.9
908228-56	AOI-7-B-17:0.8
908228-57	AOI-7-SW-14:1.3
908228-58	AOI-7-SW-15:0.5
908228-59	AOI-7-SW-16:0.5
908228-60	AOI-7-B-19:1

The 8081B trans-chlordane matrix spike and matrix spike duplicate exceeded the control limit as well as the associated relative percent difference. The analyte was not detected therefore the data were acceptable.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-3-SW-3:0.5	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-01 1/60
Date Analyzed:	08/20/19	Data File:	082009.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	94 d	50	150
DBC	103 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-3-B-1:1.6	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-02 1/6
Date Analyzed:	08/14/19	Data File:	081429.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.39

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-3-SW-4:0.5	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-04 1/60
Date Analyzed:	08/20/19	Data File:	082010.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	93 d	50	150
DBC	96 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.84

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-3-SW-2:0.5	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-05 1/6
Date Analyzed:	08/14/19	Data File:	081431.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.011

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-3-SW-1:1.8	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-06 1/6
Date Analyzed:	08/15/19	Data File:	081516.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.074
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.24
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-2-B-5:2	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-07 1/6
Date Analyzed:	08/14/19	Data File:	081432.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.011

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-2-SW-6:1	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-08 1/6
Date Analyzed:	08/14/19	Data File:	081435.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-2-SW-7:1	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-09 1/6
Date Analyzed:	08/14/19	Data File:	081436.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-2-SW-8:1.5	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-10 1/6
Date Analyzed:	08/14/19	Data File:	081437.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-77	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-11 1/6
Date Analyzed:	08/14/19	Data File:	081438.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	54	50	150
DBC	67	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-14:1	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-12 1/6
Date Analyzed:	08/14/19	Data File:	081439.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	69	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-15:3	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-13 1/6
Date Analyzed:	08/14/19	Data File:	081440.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-16:1	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-14 1/6
Date Analyzed:	08/14/19	Data File:	081441.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-19:1	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-15 1/6
Date Analyzed:	08/14/19	Data File:	081442.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-20:1	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-16 1/6
Date Analyzed:	08/14/19	Data File:	081443.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-24:2	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-17 1/6
Date Analyzed:	08/15/19	Data File:	081444.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.14

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-21:0.8	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-18 1/6
Date Analyzed:	08/15/19	Data File:	081445.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-23:2	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-19 1/6
Date Analyzed:	08/15/19	Data File:	081446.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-17:1	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-20 1/6
Date Analyzed:	08/15/19	Data File:	081447.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.056

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-78	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-21 1/6
Date Analyzed:	08/15/19	Data File:	081448.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-22:2.5	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-22 1/6
Date Analyzed:	08/15/19	Data File:	081512.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-24:2.5	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-23 1/6
Date Analyzed:	08/15/19	Data File:	081517.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-23:2.5	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-24 1/6
Date Analyzed:	08/15/19	Data File:	081524.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-18:0.5	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-25 1/6
Date Analyzed:	08/15/19	Data File:	081525.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-25:2.5	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-26 1/6
Date Analyzed:	08/15/19	Data File:	081526.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.024

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-27:3	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-27 1/6
Date Analyzed:	08/15/19	Data File:	081527.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.015

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-28:3	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-28 1/6
Date Analyzed:	08/15/19	Data File:	081528.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-26:3	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-29 1/6
Date Analyzed:	08/15/19	Data File:	081529.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-29:3	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-30 1/6
Date Analyzed:	08/15/19	Data File:	081530.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-SW-6:0.5	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-31 1/6
Date Analyzed:	08/15/19	Data File:	081531.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.019

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-SW-7:1	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-32 1/6
Date Analyzed:	08/15/19	Data File:	081532.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.034

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-SW-8:1	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-33 1/6
Date Analyzed:	08/15/19	Data File:	081533.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.074

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-B-8:2	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-34 1/6
Date Analyzed:	08/15/19	Data File:	081534.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-SW-9:1	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-35 1/6
Date Analyzed:	08/15/19	Data File:	081535.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.17

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-SW-11:1.5	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-36 1/6
Date Analyzed:	08/15/19	Data File:	081536.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-B-9:3	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-37 1/6
Date Analyzed:	08/15/19	Data File:	081537.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.013

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-SW-13:0.8	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-38 1/6
Date Analyzed:	08/15/19	Data File:	081537A.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-79	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-39 1/6
Date Analyzed:	08/15/19	Data File:	081538.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-80	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-40 1/6
Date Analyzed:	08/15/19	Data File:	081539.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-SW-8:3	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-41 1/6
Date Analyzed:	08/15/19	Data File:	081540.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-SW-9:3	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-42 1/6
Date Analyzed:	08/15/19	Data File:	081515.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-SW-10:3	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-43 1/6
Date Analyzed:	08/15/19	Data File:	081542.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	106	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-B-17:4	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-44 1/6
Date Analyzed:	08/16/19	Data File:	081543.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-6-B-18:4	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-45 1/6
Date Analyzed:	08/16/19	Data File:	081544.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	105	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-B-10:2	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-46 1/6
Date Analyzed:	08/16/19	Data File:	081545.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-30:2	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-47 1/6
Date Analyzed:	08/16/19	Data File:	081546.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-9:0.9	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-48 1/6
Date Analyzed:	08/16/19	Data File:	081547.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-81	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-49 1/6
Date Analyzed:	08/16/19	Data File:	081548.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.011

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-13:0.6	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-50 1/6
Date Analyzed:	08/16/19	Data File:	081549.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-10:0.5	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-51 1/6
Date Analyzed:	08/16/19	Data File:	081550.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-11:0.5	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-52 1/6
Date Analyzed:	08/16/19	Data File:	081551.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.017

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-82	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-53 1/6
Date Analyzed:	08/16/19	Data File:	081552.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	53	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-12:0.9	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-54 1/6
Date Analyzed:	08/16/19	Data File:	081553.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-18:0.9	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-55 1/6
Date Analyzed:	08/16/19	Data File:	081606.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-17:0.8	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-56 1/6
Date Analyzed:	08/16/19	Data File:	081607.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-14:1.3	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-57 1/6
Date Analyzed:	08/16/19	Data File:	081608.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-15:0.5	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-58 1/6
Date Analyzed:	08/16/19	Data File:	081609.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.027

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-16:0.5	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-59 1/6
Date Analyzed:	08/16/19	Data File:	081610.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-19:1	Client:	Environmental Partners
Date Received:	08/13/19	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	908228-60 1/6
Date Analyzed:	08/16/19	Data File:	081611.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	09-1994 mb 1/6
Date Analyzed:	08/15/19	Data File:	081506.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	09-1995 mb 1/6
Date Analyzed:	08/15/19	Data File:	081507.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	88	50	150
DBC	109	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 908228
Date Extracted:	08/14/19	Lab ID:	09-1993 mb 1/6
Date Analyzed:	08/20/19	Data File:	082008.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	94	50	150
DBC	112	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/21/19

Date Received: 08/13/19

Project: 74001, F&BI 908228

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908228-22 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	82	78	45-130	5

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	90	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/21/19

Date Received: 08/13/19

Project: 74001, F&BI 908228

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908228-42 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	80	72	45-130	11

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	88	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/21/19

Date Received: 08/13/19

Project: 74001, F&BI 908228

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908228-06 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	<0.01	63	70	45-111	11
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	<0.01	68	74	50-117	8
beta-BHC	mg/kg (ppm)	0.1	<0.01	70	72	49-109	3
delta-BHC	mg/kg (ppm)	0.1	0.070	100 b	75 b	39-114	29 b
Heptachlor	mg/kg (ppm)	0.1	<0.01	75	73	40-131	3
Aldrin	mg/kg (ppm)	0.1	<0.01	87	88	44-121	1
Heptachlor Epoxide	mg/kg (ppm)	0.1	<0.01	85	83	46-122	2
trans-Chlordane	mg/kg (ppm)	0.1	<0.01	579 vo	261 vo	41-129	76 vo
cis-Chlordane	mg/kg (ppm)	0.1	<0.01	70	77	44-120	10
4,4'-DDE	mg/kg (ppm)	0.1	<0.01	66	75	50-150	13
Endosulfan I	mg/kg (ppm)	0.1	<0.01	66	74	45-124	11
Dieldrin	mg/kg (ppm)	0.1	0.23	3 b	7 b	45-130	80 b
Endrin	mg/kg (ppm)	0.1	<0.01	78	86	50-140	10
4,4'-DDD	mg/kg (ppm)	0.1	<0.01	71	77	26-155	8
Endosulfan II	mg/kg (ppm)	0.1	<0.01	61	65	40-135	6
4,4'-DDT	mg/kg (ppm)	0.1	<0.01	64	67	50-150	5
Endrin Aldehyde	mg/kg (ppm)	0.1	<0.01	74	77	35-139	4
Methoxychlor	mg/kg (ppm)	0.1	<0.01	67	70	28-162	4
Endosulfan Sulfate	mg/kg (ppm)	0.1	<0.01	63	68	40-141	8
Endrin Ketone	mg/kg (ppm)	0.1	<0.01	69	74	41-147	7
Toxaphene	mg/kg (ppm)	4	<1	111	110	50-150	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/21/19

Date Received: 08/13/19

Project: 74001, F&BI 908228

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
alpha-BHC	mg/kg (ppm)	0.1	75	56-113
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	79	58-120
beta-BHC	mg/kg (ppm)	0.1	84	70-130
delta-BHC	mg/kg (ppm)	0.1	84	70-130
Heptachlor	mg/kg (ppm)	0.1	84	56-124
Aldrin	mg/kg (ppm)	0.1	86	70-130
Heptachlor Epoxide	mg/kg (ppm)	0.1	85	70-130
trans-Chlordane	mg/kg (ppm)	0.1	82	60-123
cis-Chlordane	mg/kg (ppm)	0.1	86	70-130
4,4'-DDE	mg/kg (ppm)	0.1	85	70-130
Endosulfan I	mg/kg (ppm)	0.1	83	62-124
Dieldrin	mg/kg (ppm)	0.1	83	70-130
Endrin	mg/kg (ppm)	0.1	97	56-147
4,4'-DDD	mg/kg (ppm)	0.1	90	54-137
Endosulfan II	mg/kg (ppm)	0.1	77	42-140
4,4'-DDT	mg/kg (ppm)	0.1	83	25-169
Endrin Aldehyde	mg/kg (ppm)	0.1	82	21-135
Methoxychlor	mg/kg (ppm)	0.1	90	54-154
Endosulfan Sulfate	mg/kg (ppm)	0.1	82	39-148
Endrin Ketone	mg/kg (ppm)	0.1	85	46-134
Toxaphene	mg/kg (ppm)	4	85	56-145

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

908228

SAMPLE CHAIN OF CUSTODY

MC 08-13-19

Page # 1 of 6

605

Report To Thom Morin; Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WAPhone (425) 395-0100 Email thom@epi-wa.com
betsy@epi-wa.comSAMPLERS (signature)
Betsy WingPROJECT NAME Brookdale

PO #

74001

REMARKS

INVOICE TO

10100 USA

TURNAROUND TIME

Standard Turnaround
RUSH 5 day 747
Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
AD1-3-SW-3:0.5	01	08/12/19	0835	Soil	1								
AD1-3-B-1:1.6	02		0836										
AD1-3-B-1:2.6	03		0841										
AD1-3-SW-4:0.5	04		0844										
AD1-3-SW-2:0.5	05		0845										
AD1-3-SW-1:1.8	06		0846										
AD1-2-B-5:2	07		0906										
AD1-2-SW-6:1	08		0909										
AD1-2-SW-7:1	09		0911										
AD1-2-SW-8:1.5	10		0916										

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: Betsy WingReceived by: Michael E. ...

Relinquished by:

Received by:

EPI

Fibre

↓

↓

Samples received at

4:00

908228

SAMPLE CHAIN OF CUSTODY

ME 08-13-19

Page # 2 of 605

Report To Thom Martin, Betsy Wing
 Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (206) 395-0010 Email thom@epi.wa.com
betsy@epi.wa.com

SAMPLES (signature) <u>Betsy Wing</u>		PO #
PROJECT NAME		
REMARKS		INVOICE TO
Brookdale		74001
		10100 USA

TURNAROUND TIME	
Standard Turnaround	
RUSH <u>5 day</u> <u>141</u>	
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM				
DUP-77	11	08/12/19	—	Soil	1											
A01-4-SW-14:1	12		0937										X			
A01-4-SW-15:3	13		0938										X			
A01-4-SW-16:1	14		0941										X			
A01-4-SW-19:1	15		0942										X			
A01-4-SW-20:1	16		0944										X			
A01-4-B-24:2	17		0946										X			
A01-4-SW-21:0.8	18		0950										X			
A01-4-B-23:2	19		0954										X			
A01-4-SW-17:1	20		0956										X			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>Betsy Wing</u>		Betsy Wing		EPI		8/13/19		0631	
Received by: <u>Michael Eckert</u>		Michael Eckert		Fibers					
Relinquished by:									
Received by:				Samples received at		4 oC			

908228

SAMPLE CHAIN OF CUSTODY

MC 08-13-19

Page # 3 of 6

COS

Report To Thom Munro, Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (206) 395-0010 Email thom@epi-custody.com
betsy@epi-custody.comSAMPLES (signature)
Betsy Wing

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

Idigo USA

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 5-day 4T
 Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
DUP-78	21	08/12/19	—	Soil	1								
AD1-4-SW-22:2.5	22		1003										
AD1-4-SW-24:2.5	23		1004										
AD1-4-SW-23:2.5	24		1005										
AD1-4-SW-18:0.5	25		1006										
AD1-4-SW-25:2.5	26		1008										
AD1-4-SW-27:3	27		1043										
AD1-4-SW-28:3	28		1044										
AD1-4-SW-26:3	29		1046										
AD1-4-SW-29:3	30		1048										

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Betsy WingBetsy WingEP18/13/190631

Received by:

Michael EdwardsFiber11

Ph: (206) 285-8282

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Received by:

Samples received at

4 °C

908228

SAMPLE CHAIN OF CUSTODY

ME 08-13-19

Page # 4 of 6

cos

Report To Thom Monn, Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-8800 Email thommon@epi-wa.comBetsy Wing@epi-wa.comSAMPLERS (Signature) Michaela DeCene

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

Idaho USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 5-day MT

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

TPH-HCID
TPH-Diesel
TPH-Gasoline
BTEX by 8021B
VOCs by 8260C
SVOCs by 8270D
PAHs 8270D SIM
Dieldrin - Method 8081

Notes

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-5-SW-6:0.5	31	08/12/19	1109	Soil	1								
A01-5-SW-7:1	32		1113										
A01-5-SW-8:1	33		1116										
A01-5-B-8:2	34		1118										
A01-5-SW-9:1	35		1119										
A01-5-SW-11:1.5	36		1120										
A01-5-B-9:3	37		1125										
A01-5-SW-13:0.8	38		1126										
Dup-79	39												
Dup-80	40												

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by: Betsy WingReceived by: Michaela DeCene

Relinquished by:

EP1 Betsy WingEP18/13/190631

Received by:

Michaela DeCeneEP18/13/190631

Received by:

Samples received at

4cc

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

908228

SAMPLE CHAIN OF CUSTODY

ME 08-13-19

Page # 5 of 6

Report To: Thom Main, Betsy WingCompany: EP1Address: 1180 NW Maple St, Ste 310City, State, ZIP: Issaquah, WA 98027Phone: (206) 235-0210 Email: thommain@epi-usa.combetsywing@epi-usa.com

SAMPLES (signature) <u>Debra Breene</u>	
PROJECT NAME	PO #
<u>Brookdale</u>	<u>74001.1</u>
REMARKS	INVOICE TO
	<u>Lehigh</u>
	<u>USA</u>

TURNAROUND TIME
<input type="checkbox"/> Standard Turnaround
<input checked="" type="checkbox"/> RUSH <u>5 day</u>
Rush charges authorized by: <u>MT</u>
SAMPLE DISPOSAL
<input type="checkbox"/> Dispose after 30 days
<input checked="" type="checkbox"/> Archive Samples
<input type="checkbox"/> Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM				
A01-6-SW-8:3	41	08/12/19	1143	soil	1								X			
A01-6-SW-9:3	42		1146										X			
A01-6-SW-10:3	43		1147										X			
A01-6-B-17:4	44		1148										X			
A01-6-B-18:4	45		1156										X			
A01-5-B-10:2	46		1214										X			
A01-4-B-30:2	47		1229										X			
A01-7-SW-9:0.9	48		1308										X			
DWP-81	49		—										X			
A01-7-SW-13:0.6	50		1309										X			

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruja, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph: (206) 285-8282

Received by: <u>Betsy Wing</u>	Received by: <u>Betsy Wing</u>	Received by: <u>Michael Lelli</u>
Relinquished by: <u>Michael Lelli</u>	Relinquished by: <u>Michael Lelli</u>	Relinquished by: <u>Michael Lelli</u>
Received by: <u>Michael Lelli</u>	Received by: <u>Michael Lelli</u>	Received by: <u>Michael Lelli</u>
Samples received at: <u>4</u>	Samples received at: <u>4</u>	Samples received at: <u>4</u>
OC	OC	OC

SAMPLE CHAIN OF CUSTODY

ME 08-13-19

708228

Report To Thom Morin, Betsy Wing

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (206) 895-0910 Email thom@epi-wa.com

betsyw@epi-wa.com

SAMPLERS (signature) Robica Becerra

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

Idagio USA

Page # 6 of 6 COS

TURNAROUND TIME
☐ Standard Turnaround
☒ RUSH 5 day TAT
Rush charges authorized by:

SAMPLE DISPOSAL
☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-7-SW-10:0.5	51	8/12/19	1312	Soil	1								
A01-7-SW-11:0.5	52		1316										
DUP-82	53												
A01-7-SW-12:0.9	54		1317										
A01-7-B-18:0.9	55		1323										
A01-7-B-17:0.8	56		1324										
A01-7-SW-14:1.3	57		1326										
A01-7-SW-15:0.5	58		1328										
A01-7-SW-16:0.5	59		1331										
A01-7-B-19:1	60		1332										

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph: (206) 285-8282

Relinquished by: Betsy Wing

Received by: Michael Hall

Relinquished by:

Received by:

Betsy Wing

EPI

8/13/19

0631

Michael Hall

Fib

1

1

Samples received at

4 °C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 22, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 74001, F&BI 908257

Dear Mr Morin:

Included are the results from the testing of material submitted on August 14, 2019 from the 74001, F&BI 908257 project. There are 63 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0822R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 14, 2019 by Friedman & Bruya, Inc. from the Environmental Partners 74001, F&BI 908257 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
908257-01	AOI-7-SW-17:1.5
908257-02	AOI-7-SW-21:1.2
908257-03	AOI-7-SW-18:1.5
908257-04	AOI-7-SW-22:1.2
908257-05	AOI-7-SW-19:1.5
908257-06	AOI-7-SW-23:1.2
908257-07	AOI-7-SW-24:1.2
908257-08	AOI-7-B-2:2.1
908257-09	AOI-7-SW-20:1.5
908257-10	AOI-7-B-15:3
908257-11	Dup-83
908257-12	AOI-8-SW-7:1.0
908257-13	AOI-8-SW-8:1.0
908257-14	AOI-8-SW-9:1.0
908257-15	AOI-8-SW-10:1.0
908257-16	AOI-8-SW-11:0.5
908257-17	AOI-8-SW-12:0.5
908257-18	AOI-8-SW-13:0.5
908257-19	Dup-84
908257-20	AOI-8-SW-14:1.5
908257-21	AOI-8-SW-15:1.5
908257-22	AOI-8-B-6:3.5
908257-23	AOI-8-SW-16:1.5
908257-24	AOI-8-SW-17:2.5
908257-25	AOI-8-SW-18:2.5
908257-26	AOI-8-B-7:3.5
908257-27	AOI-8-SW-19:2.5
908257-28	AOI-8-B-2:3
908257-29	AOI-8-SW-20:2.5
908257-30	AOI-8-B-1:3.7
908257-31	Dup-85
908257-32	Dup-86
908257-33	AOI-8-B-12:1
908257-34	AOI-8-B-13:1
908257-35	AOI-8-SW-21:2.5
908257-36	AOI-8-SW-22:2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
908257-37	AOI-8-B-14:1.5
908257-38	AOI-8-SW-23:2.5
908257-39	AOI-8-B-15:1.5
908257-40	AOI-8-SW-24:2.5
908257-41	AOI-8-SW-25:2.5
908257-42	AOI-8-B-16:1
908257-43	AOI-10-SW-9:0.5
908257-44	Dup-87
908257-45	AOI-10-SW-10:0.5
908257-46	AOI-10-SW-11:0.8
908257-47	AOI-10-SW-12:1.2
908257-48	AOI-10-SW-17:1.5
908257-49	AOI-10-SW-14:1.5
908257-50	AOI-10-SW-13:1
908257-51	AOI-10-SW-15:1.5
908257-52	AOI-10-SW-16:1.5
908257-53	AOI-10-B-14:1.5
908257-54	AOI-10-B-15:1.5

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-17:1.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-01 1/6
Date Analyzed:	08/16/19	Data File:	081616.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	92	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-21:1.2	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-02 1/6
Date Analyzed:	08/16/19	Data File:	081622.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.20

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-18:1.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-03 1/6
Date Analyzed:	08/16/19	Data File:	081623.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-22:1.2	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-04 1/6
Date Analyzed:	08/16/19	Data File:	081624.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.058

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-19:1.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-05 1/6
Date Analyzed:	08/16/19	Data File:	081625.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	88	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-23:1.2	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-06 1/6
Date Analyzed:	08/16/19	Data File:	081626.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	89	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-24:1.2	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-07 1/6
Date Analyzed:	08/16/19	Data File:	081627.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-2:2.1	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-08 1/6
Date Analyzed:	08/16/19	Data File:	081628.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.027

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-20:1.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-09 1/6
Date Analyzed:	08/16/19	Data File:	081629.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.012

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-15:3	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-10 1/6
Date Analyzed:	08/16/19	Data File:	081630.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-83	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-11 1/6
Date Analyzed:	08/16/19	Data File:	081631.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	89	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-7:1.0	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-12 1/6
Date Analyzed:	08/16/19	Data File:	081632.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.085

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-8:1.0	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-13 1/6
Date Analyzed:	08/16/19	Data File:	081633.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-9:1.0	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-14 1/6
Date Analyzed:	08/16/19	Data File:	081634.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-10:1.0	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-15 1/6
Date Analyzed:	08/16/19	Data File:	081635.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.015

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-11:0.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-16 1/6
Date Analyzed:	08/16/19	Data File:	081636.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.015

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-12:0.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-17 1/6
Date Analyzed:	08/16/19	Data File:	081637.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-13:0.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-18 1/6
Date Analyzed:	08/16/19	Data File:	081638.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-84	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-19 1/6
Date Analyzed:	08/16/19	Data File:	081639.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	88	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-14:1.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-20 1/6
Date Analyzed:	08/16/19	Data File:	081640.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-15:1.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-21 1/6
Date Analyzed:	08/17/19	Data File:	081645A.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	92	50	150
DBC	105	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-6:3.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-22 1/6
Date Analyzed:	08/17/19	Data File:	081646.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-16:1.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-23 1/6
Date Analyzed:	08/17/19	Data File:	081647.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-17:2.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-24 1/6
Date Analyzed:	08/17/19	Data File:	081648.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-18:2.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-25 1/6
Date Analyzed:	08/17/19	Data File:	081649.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-7:3.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-26 1/6
Date Analyzed:	08/17/19	Data File:	081650.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-19:2.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-27 1/6
Date Analyzed:	08/17/19	Data File:	081651.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.077

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-2:3	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-28 1/6
Date Analyzed:	08/17/19	Data File:	081652.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-20:2.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-29 1/6
Date Analyzed:	08/17/19	Data File:	081653.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-1:3.7	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-30 1/6
Date Analyzed:	08/17/19	Data File:	081654.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-85	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-31 1/6
Date Analyzed:	08/20/19	Data File:	082022.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-86	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-32 1/6
Date Analyzed:	08/20/19	Data File:	082023.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-12:1	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-33 1/6
Date Analyzed:	08/20/19	Data File:	082024.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-13:1	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-34 1/6
Date Analyzed:	08/20/19	Data File:	082025.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.013

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-21:2.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-35 1/6
Date Analyzed:	08/20/19	Data File:	082026.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-22:2	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-36 1/6
Date Analyzed:	08/20/19	Data File:	082027.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-14:1.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-37 1/6
Date Analyzed:	08/20/19	Data File:	082028.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-23:2.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-38 1/6
Date Analyzed:	08/20/19	Data File:	082029.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-15:1.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-39 1/6
Date Analyzed:	08/20/19	Data File:	082030.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.015

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-24:2.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-40 1/6
Date Analyzed:	08/20/19	Data File:	082031.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-25:2.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-41 1/6
Date Analyzed:	08/20/19	Data File:	082032.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	90	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-16:1	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-42 1/6
Date Analyzed:	08/20/19	Data File:	082033.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-SW-9:0.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-43 1/6
Date Analyzed:	08/20/19	Data File:	082034.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-87	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-44 1/6
Date Analyzed:	08/20/19	Data File:	082035.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-SW-10:0.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-45 1/6
Date Analyzed:	08/20/19	Data File:	082036.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-SW-11:0.8	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-46 1/6
Date Analyzed:	08/20/19	Data File:	082040.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-SW-12:1.2	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-47 1/6
Date Analyzed:	08/20/19	Data File:	082041.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-SW-17:1.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-48 1/6
Date Analyzed:	08/20/19	Data File:	082042.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-SW-14:1.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-49 1/6
Date Analyzed:	08/20/19	Data File:	082043.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.011

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-SW-13:1	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-50 1/6
Date Analyzed:	08/20/19	Data File:	082044.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-SW-15:1.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-51 1/6
Date Analyzed:	08/20/19	Data File:	082045.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.013

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-SW-16:1.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-52 1/6
Date Analyzed:	08/20/19	Data File:	082046.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-B-14:1.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-53 1/6
Date Analyzed:	08/20/19	Data File:	082047.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-10-B-15:1.5	Client:	Environmental Partners
Date Received:	08/14/19	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	908257-54 1/6
Date Analyzed:	08/20/19	Data File:	082048.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	09-2004 mb 1/6
Date Analyzed:	08/16/19	Data File:	081612.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	102	50	150
DBC	108	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	09-2005 mb 1/6
Date Analyzed:	08/16/19	Data File:	081642.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	99	50	150
DBC	106	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 908257
Date Extracted:	08/15/19	Lab ID:	09-2006 mb 1/6
Date Analyzed:	08/20/19	Data File:	082007.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/22/19

Date Received: 08/14/19

Project: 74001, F&BI 908257

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908257-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	79	81	45-130	2

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	91	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/22/19

Date Received: 08/14/19

Project: 74001, F&BI 908257

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908257-21 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	82	85	45-130	4

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	90	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/22/19

Date Received: 08/14/19

Project: 74001, F&BI 908257

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908257-41 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	86	84	45-130	2

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	92	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

908257

SAMPLE CHAIN OF CUSTODY

ME 08-14-19

Page # 841 of 1005

TURNAROUND TIME

Standard Turnaround
RUSH 5 day 14T
Rush charges authorized by:

Report To Thom Monin, Betsy Wing
Company EP1
Address 1180 NW Maple St, Ste 310
City, State, ZIP Issaquah, WA 98027
Phone (206) 398-0010 Email thommon@ep1-wa.com
Betsy Wing ep1-wa.com

SAMPLERS (signature)
Betsy Wing
PROJECT NAME
Brookdale

PO #

74001

REMARKS

INVOICE TO

EP1

SAMPLE DISPOSAL

☐ Standard Turnaround
☐ RUSH
☒ Rush charges authorized by:

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

TPH-HCID
TPH-Diesel
TPH-Gasoline
BTEX by 8021B
VOCs by 8260C
SVOCs by 8270D
PAHs 8270D SIM
Diels Alder (method 8081)

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Diels Alder (method 8081)	Notes
A01-7-SW-17:1.5	01	8/13/19	0841	Soil	1									
A01-7-SW-21:0.5	62		0844		1									
A01-7-SW-18:1.5	63		0845											
A01-7-SW-22:1.2	04		0846											
A01-7-SW-19:1.5	65		0849											
A01-7-SW-23:1.2	06		0850											
A01-7-SW-24:1.2	67		0852											
A01-7-B-2:2.1	08		0854											
A01-7-SW-20:1.5	09		0855											
A01-7-B-15:3	16		0905											

Samples received at 4:00

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Betsy Wing

EP1

8/14/19

0633

Received by:

Michael E. Hall

FEB

1

1

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Received by:

908257

SAMPLE CHAIN OF CUSTODY

ME 08-14-19

Page # 2 of 6

Betsy Wing

Report To Thom Moran, Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WAPhone (206) 325-0000 Email thom.moran@epi-usa.comBetsy WingPROJECT NAME Brookdale

PO #

74001

REMARKS

INVOICE TO

Ichijo USA

TURNAROUND TIME
☐ Standard Turnaround
☐ RUSH 5 day 7AT
Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	(SOS) Dielrich (method 8081)			
Dup-83	11	8/13/19	—	soil	1								X			
PO1-8-SW-7:1:0	12		1005										X			
PO1-8-SW-8:1:0	13		1009										X			
PO1-8-SW-9:1:0	14		1013										X			
PO1-8-SW-10:1:0	15		1015										X			
PO1-8-SW-11:0.5	16		1021										X			
PO1-8-SW-12:0.5	17		1027										X			
PO1-8-SW-13:0.5	18		1035										X			
Dup-84	19		—										X			
PO1-8-SW-14:1.5	20		1047										X			

Samples received at 4:00

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: Betsy Wing

Betsy Wing

EP1

8/14/19

0633

Relinquished by:

Michael Eckel

F&B

↓

↓

Received by:

908257

SAMPLE CHAIN OF CUSTODY

ME 08-14-19

Page # 3 of 4

Report To: Thom Motion, Betsy Wing

Company: EPI

Address: 1180 NW Maple St, Ste 310

City, State, ZIP: Issaquah, WA 98027

Phone: (425) 395-0010 Email: thom@epi-wa.com
betsy@epi-wa.com

SAMPLERS (signature) <i>Betsy Wing</i>	
PROJECT NAME Brookdale	PO # 74001
REMARKS	INVOICE TO <i>EPI wing</i>

TURNAROUND TIME Standard Turnaround RUSH 5 day 1AT Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other
---	--

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-8-SW-15:1.5	21	8/13/19	1051	Soil	1							X	
A01-8-B-10:3.5	22		1056									X	
A01-8-SW-16:1.5	23		1057									X	
A01-8-SW-17:2.5	24		1101									X	
A01-8-SW-18:2.5	25		1105									X	
A01-8-B-7:3.5	26		1106									X	
A01-8-SW-19:2.5	27		1109									X	
A01-8-B-2:3	28	8/13/19	1114	soil	1							X	Samples received at 400C
A01-8-SW-20:2.5	29		1115									X	

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by:	<i>Betsy Wing</i>	Betsy Wing	EPI	8/14/19	0653		
Received by:	<i>Michael ELLI</i>	Michael ELLI	FIR				
Relinquished by:							
Received by:							

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

908257

SAMPLE CHAIN OF CUSTODY ME 08-14-19

Page # 4 of 6

Report To Thom Morin, Betsy Wing

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-2010 Email thom@epi.com

betsy@epi.com

SAMPLES (signature) <u>Betsy Wing</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001</u>
REMARKS	INVOICE TO <u>1 chiyo USA</u>

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>5 day TAT</u> Rush charges authorized by: _____	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Fieldrun (Method 8081)			
A01-8-B-1:3.7	30	8/13/19	1116	Soil	1								X			
Dup-85	31												X			
Dup-86	32												X			
A01-8-B-12:1	33		1144										X			
A01-8-B-13:1	34		1146										X			
A01-8-SW-21:25	35		1149										X			
A01-8-SW-22:2	36		1155										X			
A01-8-B-14:1.5	37		1156										X			
A01-8-SW-23:2.5	38		1159										X			Samples received at 4:00
A01-8-B-15:1.5	39		1202										X			

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
<u>Betsy Wing</u>		<u>Betsy Wing</u>		<u>EPI</u>		<u>08/14/19</u>	<u>0633</u>
Relinquished by:		Michael E. Celli		<u>Fiber</u>		<u>4</u>	<u>4</u>
Received by:							

968257

SAMPLE CHAIN OF CUSTODY

NE 08-14-19

Page # 5 of 6

5:05

Report To Thom Moran, Betsy WineCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email thomm@epi-wa.com0010 betsywine@epi-wa.comSAMPLED (Signature)
Betsy Wine

PROJECT NAME

PO #

Brookdale74001

REMARKS

INVOICE TO

Lehigh USATURNAROUND TIME
☐ Standard Turnaround
☐ RUSH 5 day TAT
Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Fieldrun (Method 8081)	Notes
A01-8-SW-24:2.5	40	8/13/19	1205	Soil	1								X	
A01-8-SW-25:2.5	41		1209										X	
A01-8-B-10:1	42		1210										X	
A01-10-SW-9:0.5	43		1309										X	
DUP-87	44		—										X	
A01-10-SW-10:0.5	45		1317										X	
A01-10-SW-11:0.8	46		1321										X	
A01-10-SW-12:1.2	47		1325										X	
A01-10-SW-17:1.5	48		1326										X	Samples received at 4:00
A01-10-SW-14:1.5	49		1328										X	

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Requested by: Betsy WineBetsy WineEP108/14/190633Received by: Betsy WineBetsy WineEP108/14/190633Relinquished by: Michael ElmerMichael ElmerEP108/14/190633Received by: Michael ElmerMichael ElmerEP108/14/190633

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Page # 65 of 66

Phone (425) 395-0010 Email thomng@pi-wa.com
btsu@pi-wa.com

~~10~~ 10/10

☐ Other _____[illegible]

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Received by: <i>Betsy Wing</i>	Betsy Wing	EP1	08/14/15	0633
Received by: <i>Michael Erick</i>	Michael Erick	EPB	6	4
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 27, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale PO 74001, F&BI 908279

Dear Mr Morin:

Included are the results from the testing of material submitted on August 15, 2019 from the Brookdale PO 74001, F&BI 908279 project. There are 62 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager, Betsy Wing

Enclosures

c: Cynthia Moon, Charles McFadden
EPI0827R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 15, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale PO 74001, F&BI 908279 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
908279 -01	AOI-4-SW-32:0.9
908279 -02	AOI-4-SW-31:0.9
908279 -03	AOI-4-SW-30:1.5
908279 -04	AOI-4-B-25:1.5
908279 -05	AOI-11-SW-8:0.5
908279 -06	DUP-88
908279 -07	AOI-11-SW-9:0.5
908279 -08	AOI-11-B-15:1
908279 -09	AOI-11-SW-10:0.8
908279 -10	AOI-11-SW-11:0.8
908279 -11	AOI-11-B-16:1.5
908279 -12	AOI-11-SW-23:2
908279 -13	AOI-11-B-14:3.5
908279 -14	AOI-11-SW-24:2.5
908279 -15	AOI-11-SW-25:1.5
908279 -16	AOI-11-B-8:4
908279 -17	AOI-11-SW-26:1.5
908279 -18	DUP-89
908279 -19	AOI-11-SW-31:1.5
908279 -20	AOI-11-SW-22:2
908279 -21	AOI-11-SW-21:2.5
908279 -22	AOI-11-B-10:3.5
908279 -23	AOI-11-B-5:4
908279 -24	AOI-11-SW-30:3
908279 -25	AOI-11-SW-27:3
908279 -26	AOI-11-SW-32:3
908279 -27	AOI-11-SW-29:3
908279 -28	AOI-11-SW-14:0.8
908279 -29	AOI-11-SW-13:0.5
908279 -30	AOI-11-SW-12:1
908279 -31	AOI-11-SW-16:0.8
908279 -32	AOI-11-SW-17:2
908279 -33	AOI-11-SW-18:2
908279 -34	AOI-11-SW-28:2.5
908279 -35	AOI-11-SW-20:2.5
908279 -36	AOI-11-SW-19:2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
908279 -37	DUP-90
908279 -38	AOI-11-SW-15:1
908279 -39	AOI-12-SW-10:1
908279 -40	AOI-12-SW-11:2
908279 -41	AOI-12-SW-15:0.4
908279 -42	AOI-12-SW-12:0.5
908279 -43	AOI-12-SW-13:0.5
908279 -44	AOI-12-B-15:3.3
908279 -45	AOI-12-B-18:1.5
908279 -46	AOI-12-B-17:1
908279 -47	DUP-91
908279 -48	AOI-12-B-16:3.3
908279 -49	AOI-12-SW-14:1

The 8081B matrix spike and matrix spike duplicate failed the relative percent difference for dieldrin. The laboratory control sample passed the acceptance criteria, therefore the results were due to matrix effect.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-32:0.9	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-01 1/6
Date Analyzed:	08/20/19	Data File:	082049.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-31:0.9	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-02 1/6
Date Analyzed:	08/20/19	Data File:	082050.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-30:1.5	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-03 1/6
Date Analyzed:	08/20/19	Data File:	082051.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.022

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-25:1.5	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-04 1/6
Date Analyzed:	08/21/19	Data File:	082052.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.011

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-8:0.5	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-05 1/6
Date Analyzed:	08/21/19	Data File:	082053.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	58	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.080

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-88	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-06 1/6
Date Analyzed:	08/21/19	Data File:	082054.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.052

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-9:0.5	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-07 1/6
Date Analyzed:	08/21/19	Data File:	082111.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.017

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-15:1	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-08 1/6
Date Analyzed:	08/21/19	Data File:	082055.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-10:0.8	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-09 1/6
Date Analyzed:	08/21/19	Data File:	082056.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	59	50	150
DBC	73	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.038

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-11:0.8	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-10 1/6
Date Analyzed:	08/21/19	Data File:	082114.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.019

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-16:1.5	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-11 1/6
Date Analyzed:	08/21/19	Data File:	082115.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	57	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-23:2	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-12 1/6
Date Analyzed:	08/21/19	Data File:	082116.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.014

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-14:3.5	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-13 1/6
Date Analyzed:	08/21/19	Data File:	082117.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-24:2.5	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-14 1/6
Date Analyzed:	08/21/19	Data File:	082118.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-25:1.5	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-15 1/6
Date Analyzed:	08/21/19	Data File:	082119.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.016

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-8:4	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-16 1/6
Date Analyzed:	08/21/19	Data File:	082120.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	51	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-26:1.5	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-17 1/6
Date Analyzed:	08/21/19	Data File:	082121.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-89	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-18 1/6
Date Analyzed:	08/21/19	Data File:	082122.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-31:1.5	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-19 1/6
Date Analyzed:	08/21/19	Data File:	082126.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-22:2	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-20 1/6
Date Analyzed:	08/21/19	Data File:	082127.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-21:2.5	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-21 1/6
Date Analyzed:	08/21/19	Data File:	082128.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	56	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-10:3.5	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-22 1/6
Date Analyzed:	08/21/19	Data File:	082129.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-5:4	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-23 1/6
Date Analyzed:	08/21/19	Data File:	082130.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-30:3	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-24 1/6
Date Analyzed:	08/21/19	Data File:	082131.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	58	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.059

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-27:3	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-25 1/6
Date Analyzed:	08/21/19	Data File:	082132.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.075

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-32:3	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-26 1/6
Date Analyzed:	08/21/19	Data File:	082133.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-29:3	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-27 1/6
Date Analyzed:	08/21/19	Data File:	082134.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-14:0.8	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-28 1/6
Date Analyzed:	08/21/19	Data File:	082135.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-13:0.5	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-29 1/6
Date Analyzed:	08/21/19	Data File:	082136.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-12:1	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-30 1/6
Date Analyzed:	08/21/19	Data File:	082137.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	59	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.34

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-16:0.8	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-31 1/6
Date Analyzed:	08/21/19	Data File:	082138.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-17:2	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-32 1/6
Date Analyzed:	08/21/19	Data File:	082139.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-18:2	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-33 1/6
Date Analyzed:	08/21/19	Data File:	082140.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-28:2.5	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-34 1/6
Date Analyzed:	08/21/19	Data File:	082141.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.029

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-20:2.5	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-35 1/6
Date Analyzed:	08/21/19	Data File:	082142.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.041

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-19:2	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-36 1/6
Date Analyzed:	08/21/19	Data File:	082146.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-90	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-37 1/6
Date Analyzed:	08/21/19	Data File:	082147.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-15:1	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-38 1/6
Date Analyzed:	08/21/19	Data File:	082148.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-SW-10:1	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-39 1/6
Date Analyzed:	08/21/19	Data File:	082149.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-SW-11:2	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-40 1/6
Date Analyzed:	08/22/19	Data File:	082150.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-SW-15:0.4	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-41 1/6
Date Analyzed:	08/22/19	Data File:	082151.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-SW-12:0.5	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-42 1/6
Date Analyzed:	08/22/19	Data File:	082152.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.024

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-SW-13:0.5	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-43 1/6
Date Analyzed:	08/22/19	Data File:	082153.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-B-15:3.3	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-44 1/6
Date Analyzed:	08/22/19	Data File:	082154.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-B-18:1.5	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-45 1/6
Date Analyzed:	08/22/19	Data File:	082155.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-B-17:1	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-46 1/6
Date Analyzed:	08/22/19	Data File:	082156.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-91	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	908279-47 1/6
Date Analyzed:	08/21/19	Data File:	082107.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-B-16:3.3	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/21/19	Lab ID:	908279-48 1/6
Date Analyzed:	08/21/19	Data File:	082127.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-SW-14:1	Client:	Environmental Partners
Date Received:	08/15/19	Project:	Brookdale PO 74001
Date Extracted:	08/21/19	Lab ID:	908279-49 1/6
Date Analyzed:	08/21/19	Data File:	082128.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	09-2006 mb 1/6
Date Analyzed:	08/20/19	Data File:	082007.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	09-2009 mb 1/6
Date Analyzed:	08/20/19	Data File:	082021.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	09-2010 mb 1/6
Date Analyzed:	08/21/19	Data File:	082145.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale PO 74001
Date Extracted:	08/15/19	Lab ID:	09-2011 mb 1/6
Date Analyzed:	08/21/19	Data File:	082106.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale PO 74001
Date Extracted:	08/21/19	Lab ID:	09-2069 mb 1/6
Date Analyzed:	08/24/19	Data File:	082350.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/19

Date Received: 08/15/19

Project: Brookdale PO 74001, F&BI 908279

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908257-41 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	86	84	45-130	2

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	92	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/19

Date Received: 08/15/19

Project: Brookdale PO 74001, F&BI 908279

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908279-07 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.015	77	79	45-130	3

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.05	108	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/19

Date Received: 08/15/19

Project: Brookdale PO 74001, F&BI 908279

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908279-27 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	72	90	45-130	22 vo

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	96	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/19

Date Received: 08/15/19

Project: Brookdale PO 74001, F&BI 908279

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908279-47 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	89	92	50-150	3

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	94	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/19

Date Received: 08/15/19

Project: Brookdale PO 74001, F&BI 908279

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908404-61 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	94	96	45-130	2

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	102	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

908279

SAMPLE CHAIN OF CUSTODY

ME 08-15-19

Page # 1 of 5 cos

Report To Thom Mann, Betsy Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0400 Email thommann@epi-wa.com
betsywing@epi-wa.com

SAMPLERS (signature) <u>Betsy Wing</u>		PO #
PROJECT NAME <u>Brookdale</u>		74001
REMARKS	INVOICE TO <u>14010</u>	

TURNAROUND TIME
<input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>5 day 141</u> Rush charges authorized by:
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Dieldrin Method 8051			
A01-4-SW-32:0.9	01	08/14/19	0853	Soil	1								X			
A01-4-SW-31:0.9	02		0854										X			
A01-4-SW-30:1.5	03		0858										X			
A01-4-B-25:1.5	04		0902										X			
A01-11-SW-8:0.5	05		1044										X			
A01-11-SW-9:0.5	06												X			
A01-11-SW-9:0.5	07		1050										X			
A01-11-B-15:1	08		1055										X			
A01-11-SW-10:0.8	09		1110										X			
A01-11-SW-11:0.8	10		1114										X			

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>Betsy Wing</u>	<u>Betsy Wing</u>	<u>EP1</u>	<u>8/15/19</u>	<u>0621</u>
<u>Michael E. Cull</u>	<u>Michael E. Cull</u>	<u>EP1</u>	<u>8/15/19</u>	<u>0621</u>
Received by:				
Relinquished by:				
Samples received at <u>4</u> °C				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

908279

SAMPLE CHAIN OF CUSTODY

ME 08-15-19

Page #

2 of 5 COS

Report To Thom Mason, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (206) 395-6010 Email Thom.Mason@epi-wa.com
Betsy.Wing@epi-wa.comSAMPLES (Signature)
Betsy Wing
PROJECT NAME

PO #

Brookdale

74001

REMARKS

INVOICE TO

1chij2

TURNAROUND TIME
☐ Standard Turnaround
☒ RUSH 5 day 145
Rush charges authorized by: _____SAMPLE DISPOSAL
☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-11-B-16:1.5	11	08/14/19	1115	Soil	1								X
A01-11-SW-23:2	12		1120										X
A01-11-B-14:3.5	13		1123										X
A01-11-SW-24:2.5	14		1124										X
A01-11-SW-25:1.5	15		1130										X
A01-11-B-8:4	16		1131										X
A01-11-SW-26:1.5	17		1134										X
DUP-89	18		—										X
A01-11-SW-31:1.5	19		1141										X
A01-11-SW-22:2	20		1142										X

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: Betsy Wing

Betsy Wing

EPI

8/15/19

0631

Received by: Michael Enck

Michael Enck

FWR

↓

↓

Received by:

908279

SAMPLE CHAIN OF CUSTODY

ME 08-15-19

Page # 4 of 5 CES

Report To: Thom Mun, Betsy WingCompany: EP1Address: 1180 NW Maple St, Ste 310City, State, ZIP: Issaquah, WA 98027Phone: (425) 395-2010 Email: thom@epi-wa.comSignature: ep1-wa.com

SAMPLERS (Signature) <u>Betsy Wing</u>		PO #
PROJECT NAME <u>Brookdale</u>		74001
REMARKS <u>14110</u>	INVOICE TO	

TURNAROUND TIME Page # 4 of 5
<input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH - 5 day AT Rush charges authorized by:
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-11-SW-16-D.8	31	08/14/19	1201	Soil	1								X
A01-11-SW-17-2	32		1209										X
A01-11-SW-18-2	33		1251										X
A01-11-SW-28-2.5	34		1254										X
A01-11-SW-20-2.5	35		1257										X
A01-11-SW-19-2	36		1300										X
DWP-90	37		—										X
A01-11-SW-15-1	38		1309										X
A01-12-SW-10-1	39		1336										X
A01-12-SW-11-2	40	✓	1338	✓	✓								X

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: <u>Betsy Wing</u>	PRINT NAME <u>Betsy Wing</u>	COMPANY <u>EP1</u>	DATE <u>8/15/19</u>	TIME <u>0631</u>
Received by: <u>Michael Ecker</u>	PRINT NAME <u>Michael Ecker</u>	COMPANY <u>FCB</u>	DATE <u>✓</u>	TIME <u>✓</u>
Relinquished by:				
Received by:				

908279

SAMPLE CHAIN OF CUSTODY

ME 08-15-19

Page # 5 of 5 cos

Report To: Tom Morin, Betsy WingCompany: EPIAddress: 1180 NW Maple St, Ste 310City, State, ZIP: Issaquah, WA 98027Phone: (206) 395-9910 Email: thom@epi-wa.combetsy@epi-wa.comSAMPLES (signature)
Betsy Wing

PROJECT NAME

Bockdale

PO #

74001

REMARKS

INVOICE TO

1 dayTURNAROUND TIME
☐ Standard Turnaround
☒ RUSH 5 day HT
Rush charges authorized by: _____SAMPLE DISPOSAL
☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Dieldrin (method 8081)			
A01-12-SM-15:0.4	41	08/14/19	1344	Soil	1								X			
A01-12-SM-12:0.5	42		1356										X			
A01-12-SM-13:0.5	43		1358										X			
A01-12-B-15:3 ³ / ₅	44		1409										X			
A01-12-B-18:1.5	45		1412										X			
A01-12-B-17:1	46		1416										X			
DWP-91	47		—										X			
A01-12-B-16:33	48		1417										X			
A01-12-SM-14:1	49		1406										X			

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Received by: Betsy WingReceived by: Michael Eddi

Relinquished by: _____

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

EPI

8/15/19

0631

Ph. (206) 285-8282

Received by: _____

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 26, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 908318

Dear Mr Morin:

Included are the results from the testing of material submitted on August 16, 2019 from the Brookdale 74001, F&BI 908318 project. There are 51 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0826R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 16, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 908318 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
908318 -01	Dup-92
908318 -02	AOI-13-SW-7:1.5
908318 -03	AOI-13-SW-13:0.5
908318 -04	AOI-13-SW-8:0.5
908318 -05	AOI-13-SW-12:0.8
908318 -06	AOI-13-B-9:1.6
908318 -07	AOI-13-SW-11:0.8
908318 -08	AOI-13-B-11:1.5
908318 -09	AOI-13-SW-9:0.8
908318 -10	AOI-13-B-10:1.5
908318 -11	AOI-13-SW-10:0.5
908318 -12	AOI-15-B-15:1
908318 -13	AOI-15-B-16:1
908318 -14	Dup-93
908318 -15	AOI-15-B-17:1.5
908318 -16	AOI-15-B-18:1
908318 -17	AOI-15-SW-8:0.5
908318 -18	AOI-15-B-20:2
908318 -19	AOI-15-SW-9:0.5
908318 -20	AOI-15-B-19:1
908318 -21	AOI-15-SW-10:0.5
908318 -22	AOI-15-B-9:3.5
908318 -23	AOI-15-SW-16:0.5
908318 -24	AOI-15-SW-11:1
908318 -25	AOI-15-SW-12:0.5
908318 -26	AOI-15-SW-15:0.5
908318 -27	AOI-15-SW-13:0.8
908318 -28	AOI-15-SW-18:2.5
908318 -29	AOI-15-SW-14:0.5
908318 -30	AOI-15-SW-17:2
908318 -31	AOI-15-SW-19:2
908318 -32	AOI-15-SW-24:1.5
908318 -33	AOI-15-SW-23:1.5
908318 -34	AOI-15-SW-20:2
908318 -35	AOI-15-SW-25:2
908318 -36	AOI-15-SW-22:1.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
908318 -37	AOI-15-SW-21:1.5
908318 -38	Dup-94
908318 -39	AOI-14-SW-9:1
908318 -40	AOI-14-SW-10:0.5
908318 -41	AOI-14-SW-11:0.5
908318 -42	AOI-14-SW-12:0.5

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-92	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/15/19	Lab ID:	908318-01 1/6
Date Analyzed:	08/21/19	Data File:	082112.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.18

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-SW-7:1.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/15/19	Lab ID:	908318-02 1/6
Date Analyzed:	08/21/19	Data File:	082113.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-SW-13:0.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/15/19	Lab ID:	908318-03 1/6
Date Analyzed:	08/21/19	Data File:	082114.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-SW-8:0.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/15/19	Lab ID:	908318-04 1/6
Date Analyzed:	08/21/19	Data File:	082115.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.015

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-SW-12:0.8	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/15/19	Lab ID:	908318-05 1/6
Date Analyzed:	08/21/19	Data File:	082116.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.048

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-B-9:1.6	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-06 1/6
Date Analyzed:	08/21/19	Data File:	082117.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-SW-11:0.8	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-07 1/6
Date Analyzed:	08/21/19	Data File:	082118.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.017

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-B-11:1.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-08 1/6
Date Analyzed:	08/21/19	Data File:	082119.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-SW-9:0.8	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-09 1/6
Date Analyzed:	08/21/19	Data File:	082120.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-B-10:1.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-10 1/6
Date Analyzed:	08/21/19	Data File:	082121.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-SW-10:0.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-11 1/6
Date Analyzed:	08/21/19	Data File:	082122.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-15:1	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/19/19	Lab ID:	908318-12 1/6
Date Analyzed:	08/22/19	Data File:	082207.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-16:1	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/19/19	Lab ID:	908318-13 1/6
Date Analyzed:	08/22/19	Data File:	082208.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-93	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-14 1/6
Date Analyzed:	08/21/19	Data File:	082129.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-17:1.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-15 1/6
Date Analyzed:	08/21/19	Data File:	082130.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-18:1	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-16 1/6
Date Analyzed:	08/21/19	Data File:	082131.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-8:0.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-17 1/6
Date Analyzed:	08/21/19	Data File:	082132.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-20:2	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-18 1/6
Date Analyzed:	08/21/19	Data File:	082137.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-9:0.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-19 1/6
Date Analyzed:	08/21/19	Data File:	082138.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-19:1	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-20 1/6
Date Analyzed:	08/21/19	Data File:	082139.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-10:0.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-21 1/6
Date Analyzed:	08/21/19	Data File:	082140.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-B-9:3.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-22 1/6
Date Analyzed:	08/21/19	Data File:	082141.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-16:0.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-23 1/6
Date Analyzed:	08/21/19	Data File:	082142.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-11:1	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-24 1/6
Date Analyzed:	08/21/19	Data File:	082143.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-12:0.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-25 1/6
Date Analyzed:	08/21/19	Data File:	082144.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-15:0.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-26 1/6
Date Analyzed:	08/21/19	Data File:	082145.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-13:0.8	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-27 1/6
Date Analyzed:	08/21/19	Data File:	082146.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-18:2.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-28 1/6
Date Analyzed:	08/21/19	Data File:	082147.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-14:0.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-29 1/6
Date Analyzed:	08/21/19	Data File:	082148.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-17:2	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-30 1/6
Date Analyzed:	08/21/19	Data File:	082149.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.014

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-19:2	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-31 1/6
Date Analyzed:	08/21/19	Data File:	082150.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.050

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-24:1.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-32 1/6
Date Analyzed:	08/21/19	Data File:	082151.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	58	50	150
DBC	73	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.026

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-23:1.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-33 1/6
Date Analyzed:	08/21/19	Data File:	082152.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-20:2	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-34 1/6
Date Analyzed:	08/21/19	Data File:	082153.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-25:2	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-35 1/6
Date Analyzed:	08/21/19	Data File:	082154.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.017

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-22:1.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-36 1/6
Date Analyzed:	08/21/19	Data File:	082155.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-15-SW-21:1.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-37 1/6
Date Analyzed:	08/21/19	Data File:	082156.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-94	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	908318-38 1/6
Date Analyzed:	08/22/19	Data File:	082161.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-9:1	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/19/19	Lab ID:	908318-39 1/6
Date Analyzed:	08/22/19	Data File:	082209.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-10:0.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/19/19	Lab ID:	908318-40 1/6
Date Analyzed:	08/22/19	Data File:	082210.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-11:0.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/19/19	Lab ID:	908318-41 1/6
Date Analyzed:	08/22/19	Data File:	082211.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-12:0.5	Client:	Environmental Partners
Date Received:	08/16/19	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/19/19	Lab ID:	908318-42 1/6
Date Analyzed:	08/22/19	Data File:	082212.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/16/19	Lab ID:	09-2011 mb2 1/6
Date Analyzed:	08/21/19	Data File:	082126.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/19/19	Lab ID:	09-2041 mb 1/6
Date Analyzed:	08/21/19	Data File:	082133.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 908318
Date Extracted:	08/19/19	Lab ID:	09-2042 mb 1/6
Date Analyzed:	08/22/19	Data File:	082157.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/26/19

Date Received: 08/16/19

Project: Brookdale 74001, F&BI 908318

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908279-47 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	89	92	50-150	3

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	94	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/26/19

Date Received: 08/16/19

Project: Brookdale 74001, F&BI 908318

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908318-18 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	73	72	50-150	1

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	89	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/26/19

Date Received: 08/16/19

Project: Brookdale 74001, F&BI 908318

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908318-38 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	77	86	50-150	11

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	89	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

ME 08-16-19

Page # 1 of 5

503

908318

Report To Thom Merrin, Betsy Wing

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 398-0000 Email thom@epi-wa.com

betsy@epi-wa.com

SAMPLES (Signature)
Betsy Wing
PROJECT NAME
Brookdale

PO #

74001

REMARKS

INVOICE TO

1chj0

TURNAROUND TIME
☐ Standard Turnaround
☒ RUSH 5 day 14T
Rush charges authorized by: _____

SAMPLE DISPOSAL
☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
DUE-92	01	08/15/19	—	Soil	1								
A01-13-SW-7:1.5	02		0831										
A01-13-SW-13:0.5	03		0834										
A01-13-SW-8:0.5	04		0837										
A01-13-SW-12:0.8	05		0840										
A01-13-B-9:1.6	06		0843										
A01-13-SW-11:0.8	07		0846										
A01-13-B-11:1.5	08		0850										
A01-13-SW-9:0.8	09		0851										
A01-13-B-10:1.5	10		0855										

SIGNATURE

Relinquished by: Betsy Wing

Received by: Michael E. Clark

PRINT NAME

Betsy Wing

Michael E. Clark

COMPANY

EPI

Field

DATE

8/16/19

1

TIME

0630

1

Ph. (206) 285-8282

Seattle, WA 98119-2029

3012 16th Avenue West

Friedman & Bruya, Inc.

Samples received at 4 °C

208318

SAMPLE CHAIN OF CUSTODY

ME 08-16-19

Page # 2 of 5

Report To Thom Meehan, Betsy Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425)395-2016 Email thom@epi-wa.com
betsy@epi-wa.com

SAMPLE CHAIN OF CUSTODY PROJECT NAME <u>Brockdale</u> PO # <u>74001</u>		INVOICE TO <u>1410</u>
REMARKS		SAMPLE DISPOSAL <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>5 day</u> <u>WT</u> Rush charges authorized by:

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-13-SW-10:0.5	11	08/15/19	0854	Soil	1							X	
A01-15-B-15.1	12		0949		1							X	
A01-15-B-16.1	13		0953		1							X	
DUP-93	14		—		1							X	
A01-15-B-17:1.5	15		1000		1							X	
A01-15-B-18.1	16		1002		1							X	
A01-15-SW-8:0.5	17		1003		1							X	
A01-15-B-20:2	18		1005		1							X	
A01-15-SW-9:0.5	19		1009		1							X	
A01-15-B-19:1	20		1010		1							X	

Relinquished by: <u>Betsy Wing</u> Received by: <u>Michael</u>		PRINT NAME <u>Betsy Wing</u> <u>Michael</u>		COMPANY <u>EP1</u> <u>F&B</u>		DATE <u>8/16/19</u> <u>1</u>		TIME <u>0630</u> <u>*</u>	
Relinquished by:		Received by:		Received by:		Received by:		Received by:	

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

908318

SAMPLE CHAIN OF CUSTODY

ME 08-16-19

Page # 3 of 503

Report To: Thom Mazon, Betsy WingCompany: EP1Address: 1180 NW Maple St, Ste 310City, State, ZIP: Issaquah, WA 98027Phone: (425) 395-0010 Email: thom@epi-wa.com
betsy@epi-wa.comSAMPLES (signature)
Betsy Wing
PROJECT NAME: 081618

PO #

Breakeale

74001

REMARKS

INVOICE TO
1 chgo USA

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 5 day TAT
Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-15-SW-10:0.5	21	08/15/19	1013	Soil	1							X	
A01-15-B-9.3.5	22		1014		1							X	
A01-15-SW-16:0.5	23		1016		1							X	
A01-15-SW-11.1	24		1019		1							X	
A01-15-SW-12:0.5	25		1023		1							X	
A01-15-SW-15:0.5	26		1024		1							X	
A01-15-SW-13:0.8	27		1027		1							X	
A01-15-SW-18:2.5	28		1028		1							X	
A01-15-SW-14:0.5	29		1032		1							X	
A01-15-SW-17:2	30		1034		1							X	

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Acquired by: Betsy WingBetsy Wing

EP1

08/16/19

0630

Received by: Betsy WingBetsy Wing

FLB

↓

↓

Relinquished by:

Michael E. Reid

FLB

↓

↓

Received by:

908318

SAMPLE CHAIN OF CUSTODY

ME 08-16-19

Page # 4 of 5

Report To Thom Munro, Betsy Wing
 Company EPI
 Address 1180 NW Maple St, Ste 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 345-0610 Email thom@epi-wa.com
betsy@epi-wa.com

SAMPLES (signature) <u>Betsy Wing</u> PROJECT NAME <u>Brookdale</u>		PO # <u>74001</u>
REMARKS <u>1 chjo</u>		INVOICE TO

TURNAROUND TIME Standard Turnaround RUSH <u>5 day TAT</u> Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Archive Samples <input type="checkbox"/> Other
--	---

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
AOI-15-SW-19:2	31	08/15/19	1036	Soil	1								X
AOI-15-SW-24:1.5	32		1039										X
AOI-15-SW-23:1.5	33		1045										X
AOI-15-SW-20:2	34		1046										X
AOI-15-SW-25:2	35		1048										X
AOI-15-SW-22:1.5	36		1051										X
AOI-15-SW-21:1.5	37		1054										X
DUP-94	38												X
AOI-14-SW-9:1	39		1135										X
AOI-14-SW-10:0.5	40		1141										X

Relinquished by: <u>Betsy Wing</u> Relinquished by: <u>Michael McCracken</u>	SIGNATURE <u>Betsy Wing</u> <u>Michael McCracken</u>	PRINT NAME <u>Betsy Wing</u> <u>Michael McCracken</u>	COMPANY <u>EPI</u> <u>Fibre</u>	DATE <u>9/6/19</u> <u>↓</u>	TIME <u>0630</u> <u>↓</u>
Received by:					

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

57103

☐ Standard Turnaround
☒ RUSH 5 day 1A1
 Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

ANALYSES REQUESTED

[illegible]

Ph. (206) 285-8282

CONFIDENTIAL

TIME

0630

4

1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 27, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 74001, F&BI 908358

Dear Mr Morin:

Included are the results from the testing of material submitted on August 19, 2019 from the 74001, F&BI 908358 project. There are 76 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Charles McFadden
EPI0827R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 19, 2019 by Friedman & Bruya, Inc. from the Environmental Partners 74001, F&BI 908358 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
908358-01	Dup-95
908358-02	AOI-14-B-19:1
908358-03	AOI-14-SW-15:1
908358-04	AOI-14-B-8:2.7
908358-05	AOI-14-SW-23:1
908358-06	AOI-14-B-6:2.9
908358-07	AOI-14-SW-18:1
908358-08	AOI-14-SW-16:1
908358-09	AOI-14-SW-13:1
908358-10	AOI-14-B-18:3
908358-11	AOI-14-B-7:3.5
908358-12	AOI-14-SW-17:1.5
908358-13	AOI-14-B-5:3
908358-14	AOI-14-SW-22:1
908358-15	AOI-14-SW-14:1
908358-16	AOI-14-SW-20:1
908358-17	AOI-14-SW-19:0.5
908358-18	AOI-14-SW-21:0.3
908358-19	AOI-16-SW-7:0.5
908358-20	AOI-16-SW-8:0.5
908358-21	AOI-16-SW-21:0.5
908358-22	AOI-16-SW-20:1.5
908358-23	AOI-16-SW-9:1.5
908358-24	Dup-96
908358-25	AOI-16-SW-19:0.5
908358-26	AOI-16-B-10:3
908358-27	AOI-16-B-11:0.8
908358-28	AOI-16-SW-10:1
908358-29	AOI-16-SW-16:2
908358-30	AOI-16-SW-11:1
908358-31	AOI-16-SW-12:1
908358-32	AOI-16-SW-17:2
908358-33	AOI-16-SW-18:2
908358-34	AOI-16-B-12:2
908358-35	AOI-17-SW-7:0.5
908358-36	AOI-17-B-12:1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
908358-37	AOI-16-SW-13:0.5
908358-38	AOI-16-SW-15:0.5
908358-39	AOI-16-B-13:2
908358-40	AOI-17-SW-8:0.8
908358-41	AOI-17-SW-9:0.8
908358-42	AOI-16-SW-14:1
908358-43	Dup-97
908358-44	AOI-17-B-13:1.5
908358-45	AOI-17-SW-10:0.8
908358-46	AOI-17-B-14:1.5
908358-47	AOI-17-SW-11:0.5
908358-48	AOI-17-B-15:1
908358-49	AOI-17-SW-13:0.5
908358-50	AOI-17-SW-12:0.5
908358-51	AOI-17-B-16:1
908358-52	AOI-17-SW-14:0.5
908358-53	Dup-98
908358-54	AOI-21-SW-9:1.5
908358-55	AOI-21-B-13:1.5
908358-56	AOI-21-SW-10:1
908358-57	AOI-21-SW-11:1
908358-58	AOI-21-SW-14:2
908358-59	AOI-21-SW-13:2
908358-60	Dup-99
908358-61	AOI-21-B-14:1.5
908358-62	AOI-21-SW-16:2
908358-63	AOI-21-SW-12:1
908358-64	AOI-21-B-4:2.5
908358-65	AOI-21-SW-15:2

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-95	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-01 1/6
Date Analyzed:	08/22/19	Data File:	082226.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.014

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-19:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-02 1/6
Date Analyzed:	08/22/19	Data File:	082227.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-15:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-03 1/6
Date Analyzed:	08/22/19	Data File:	082228.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-8:2.7	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-04 1/6
Date Analyzed:	08/22/19	Data File:	082229.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	59	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-23:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-05 1/6
Date Analyzed:	08/22/19	Data File:	082230.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-6:2.9	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-06 1/6
Date Analyzed:	08/22/19	Data File:	082231.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	58	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-18:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-07 1/6
Date Analyzed:	08/22/19	Data File:	082232.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.015

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-16:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-08 1/6
Date Analyzed:	08/22/19	Data File:	082233.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	56	50	150
DBC	73	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.013

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-13:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-09 1/6
Date Analyzed:	08/22/19	Data File:	082234.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-18:3	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-10 1/6
Date Analyzed:	08/22/19	Data File:	082235.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-7:3.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-11 1/6
Date Analyzed:	08/22/19	Data File:	082236.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-17:1.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-12 1/6
Date Analyzed:	08/22/19	Data File:	082237.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.016

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-B-5:3	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-13 1/6
Date Analyzed:	08/22/19	Data File:	082238.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-22:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-14 1/6
Date Analyzed:	08/22/19	Data File:	082239.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.016

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-14:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-15 1/6
Date Analyzed:	08/22/19	Data File:	082240.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-20:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-16 1/6
Date Analyzed:	08/23/19	Data File:	082253.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-19:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-17 1/6
Date Analyzed:	08/22/19	Data File:	082241.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-14-SW-21:0.3	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-18 1/6
Date Analyzed:	08/22/19	Data File:	082242.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.011

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-7:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-19 1/60
Date Analyzed:	08/24/19	Data File:	082410.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78 d	50	150
DBC	83 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-8:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-20 1/6
Date Analyzed:	08/23/19	Data File:	082244.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	59	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-21:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-21 1/6
Date Analyzed:	08/23/19	Data File:	082245.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.020

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-20:1.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-22 1/6
Date Analyzed:	08/23/19	Data File:	082246.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-9:1.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-23 1/6
Date Analyzed:	08/23/19	Data File:	082247.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.060

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-96	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-24 1/6
Date Analyzed:	08/23/19	Data File:	082248.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	57	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-19:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-25 1/6
Date Analyzed:	08/23/19	Data File:	082249.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	57	50	150
DBC	69	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-B-10:3	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-26 1/6
Date Analyzed:	08/23/19	Data File:	082250.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-B-11:0.8	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-27 1/6
Date Analyzed:	08/23/19	Data File:	082251.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.015

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-10:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-28 1/6
Date Analyzed:	08/23/19	Data File:	082252.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-16:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-29 1/6
Date Analyzed:	08/23/19	Data File:	082310.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-11:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-30 1/6
Date Analyzed:	08/23/19	Data File:	082311.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-12:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-31 1/6
Date Analyzed:	08/23/19	Data File:	082312.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-17:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-32 1/6
Date Analyzed:	08/23/19	Data File:	082313.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-18:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-33 1/6
Date Analyzed:	08/23/19	Data File:	082314.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	48	50	150
DBC	68	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-B-12:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-34 1/6
Date Analyzed:	08/23/19	Data File:	082318.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	58	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-SW-7:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-35 1/6
Date Analyzed:	08/23/19	Data File:	082319.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	52	50	150
DBC	65	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.029

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-B-12:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	908358-36 1/6
Date Analyzed:	08/22/19	Data File:	082223G.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	56	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-13:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-37 1/6
Date Analyzed:	08/23/19	Data File:	082320.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.044

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-15:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-38 1/6
Date Analyzed:	08/23/19	Data File:	082321.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	56	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-B-13:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-39 1/6
Date Analyzed:	08/23/19	Data File:	082322.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	57	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.014

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-SW-8:0.8	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-40 1/6
Date Analyzed:	08/23/19	Data File:	082323.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-SW-9:0.8	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-41 1/6
Date Analyzed:	08/23/19	Data File:	082324.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	59	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-14:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-42 1/6
Date Analyzed:	08/23/19	Data File:	082325.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	59	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-97	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-43 1/6
Date Analyzed:	08/23/19	Data File:	082326.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-B-13:1.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-44 1/6
Date Analyzed:	08/23/19	Data File:	082327.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	57	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-SW-10:0.8	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-45 1/6
Date Analyzed:	08/23/19	Data File:	082328.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	54	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-B-14:1.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-46 1/6
Date Analyzed:	08/23/19	Data File:	082329.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	56	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-SW-11:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-47 1/6
Date Analyzed:	08/23/19	Data File:	082330.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-B-15:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-48 1/6
Date Analyzed:	08/23/19	Data File:	082331.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-SW-13:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-49 1/6
Date Analyzed:	08/23/19	Data File:	082332.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.059

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-SW-12:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-50 1/6
Date Analyzed:	08/23/19	Data File:	082333.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-B-16:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-51 1/6
Date Analyzed:	08/23/19	Data File:	082334.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-17-SW-14:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-52 1/6
Date Analyzed:	08/23/19	Data File:	082335.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.019

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-98	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-53 1/6
Date Analyzed:	08/23/19	Data File:	082337.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	52	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-SW-9:1.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-54 1/6
Date Analyzed:	08/23/19	Data File:	082338.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-B-13:1.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-55 1/6
Date Analyzed:	08/23/19	Data File:	082339.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.018

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-SW-10:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-56 1/6
Date Analyzed:	08/23/19	Data File:	082307.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-SW-11:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-57 1/6
Date Analyzed:	08/23/19	Data File:	082340.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-SW-14:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-58 1/6
Date Analyzed:	08/23/19	Data File:	082341.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-SW-13:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-59 1/6
Date Analyzed:	08/23/19	Data File:	082342.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-99	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-60 1/6
Date Analyzed:	08/23/19	Data File:	082343.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-B-14:1.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-61 1/6
Date Analyzed:	08/23/19	Data File:	082344.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-SW-16:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-62 1/6
Date Analyzed:	08/23/19	Data File:	082345.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-SW-12:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-63 1/6
Date Analyzed:	08/23/19	Data File:	082346.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-B-4:2.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-64 1/6
Date Analyzed:	08/23/19	Data File:	082347.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-21-SW-15:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	908358-65 1/6
Date Analyzed:	08/24/19	Data File:	082348.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	09-2042 mb 1/6
Date Analyzed:	08/22/19	Data File:	082157.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM/IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	09-2049 mb 1/6
Date Analyzed:	08/22/19	Data File:	082206.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 908358
Date Extracted:	08/19/19	Lab ID:	09-2050 mb 1/6
Date Analyzed:	08/22/19	Data File:	082223F.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 908358
Date Extracted:	08/20/19	Lab ID:	09-2051 mb 1/6
Date Analyzed:	08/23/19	Data File:	082306.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/19

Date Received: 08/19/19

Project: 74001, F&BI 908358

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908318-38 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	77	86	50-150	11

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	89	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/19

Date Received: 08/19/19

Project: 74001, F&BI 908358

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908358-16 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	89	84	45-130	6

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	97	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/19

Date Received: 08/19/19

Project: 74001, F&BI 908358

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908358-36 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	81	77	45-130	5

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/19

Date Received: 08/19/19

Project: 74001, F&BI 908358

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908358-56 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	87	94	45-130	8

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	104	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

ME 08-17-19

Page # 1 of 7 Day

908358

Report To Thom Moma, Betsy Wing

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425)395-2010 Email thom@epi-wa.com
betsy@epi-wa.com

SAMPLES (signature) <u>Betsy Wing</u> PROJECT NAME <u>Brookdale</u>		PO # <u>74001</u>
REMARKS <u>Brookdale</u>		INVOICE TO <u>Leije USA</u>

TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>5 day RT</u> Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other
--	--

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
DWP-95	01	8/16/19	—	Soil	1							<input checked="" type="checkbox"/>	
A01-14-B-19.1	03		0813									<input checked="" type="checkbox"/>	
A01-14-SW-15:1	03		0818									<input checked="" type="checkbox"/>	
A01-14-B-8:2.7	04		0819									<input checked="" type="checkbox"/>	
A01-14-SW-23:1	05		0822									<input checked="" type="checkbox"/>	
A01-14-B-6:2.9	06		0823									<input checked="" type="checkbox"/>	
A01-14-SW-18:1	07		0824									<input checked="" type="checkbox"/>	
A01-14-SW-16:1	08		0824									<input checked="" type="checkbox"/>	
A01-14-SW-13:1	09		0828									<input checked="" type="checkbox"/>	
A01-14-B-18.3	10		0829									<input checked="" type="checkbox"/>	

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <u>Betsy Wing</u>		Betsy Wing		EPI		8/17/19	0630
Relinquished by: <u>Michael E. Clark</u>		Michael E. Clark		Fibre			
Received by:				Samples received at		4	0C

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

908358

SAMPLE CHAIN OF CUSTODY

ME 08-19-19

Page # 2 of 7

201

Report To Tom Murnin, Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-6010 Email thom@epi-va.com
betsy@epi-va.comSAMPLES (signature) Betsy Wing
PROJECT NAME Brookdale

PO #

74001

REMARKS

INVOICE TO

1chid
vsr

SAMPLE DISPOSAL

☐ Standard Turnaround
☒ RUSH 5 day 141
Rush charges authorized by:
☐ Dispose after 30 days
☐ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-14-B-7:3.5	11	8/16/19	0831	Soil	1								X
A01-14-SW-17:1.5	12		0832										X
A01-14-B-5:3	13		0833										X
A01-14-SW-22:1	14		0834										X
A01-14-SW-14:1	15		0836										X
A01-14-SW-20:1	16		0837										X
A01-14-SW-19:0.5	17		0842										X
A01-14-SW-21:0.3	18		0844										X
A01-16-SW-7:0.5	19		0849										X
A01-16-SW-8:0.5	20		0855										X

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Betsy Wing
Michael Ellis

PRINT NAME

Betsy Wing
Michael Ellis

COMPANY

EP1
F&B

DATE

8/19/19
4

TIME

0630
1

Received by:

Received by:	
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908358

SAMPLE CHAIN OF CUSTODY

M E 08-19-19

Page # 3 of 7

7 day

Report To Twom Mountain, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 345-0010 Email twom@epi.wa.com
betsy@epi.wa.comREPORTERS (signature)
Betsy Wing
PROJECT NAMEBrookdale

PO #

7401

REMARKS

INVOICE TO
1chiro USA

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 5 day TAT
Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-16-SW-21:0.5	21	8/16/19	0850	Soil	1								
A01-16-SW-20:1.5	22		0858		1								
A01-16-SW-9:1.5	23		0901		1								
DUP-96	24		—										
A01-16-SW-19:0.5	25		0906										
A01-16-B-10:3	26		0908										
A01-16-B-11:0.8	27		0909										
A01-16-SW-10:1	28		0913										
A01-16-SW-16:2	29		0914										
A01-16-SW-11:1	30		0919										

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by:

Betsy WingBetsy WingEPI8/19/190630

Relinquished by:

Received by:

Michael EnckFeb✓✓

908358

SAMPLE CHAIN OF CUSTODY

ME 08-19-19

4 of 7 Day

Report To: Thomson Morton, Betty WineCompany: EP1Address: 1180 NW Maple St, Ste 310City, State, ZIP: Issaquah, WA 98027Phone: (425) 395-0010 Email: thomson@epi-va.com

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO
1 Chicago USA
☐ Standard Turnaround
☒ RUSH 5 day TAT
 Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-16-SW-12:1	31	8/16/19	0921	Soil	1								
A01-16-SW-17:2	32		0922										
A01-16-SW-18:2	33		0924										
A01-16-B-12:2	34		0925										
A01-16-SW-7:0.5	35		0926										
A01-16-B-12:1	36		0928										
A01-16-SW-13:0.5	37		0931										
A01-16-SW-15:0.5	38		0932										
A01-16-B-13:2	39		0934										
A01-17-SW-8:0.8	40		0936										

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Received by:

Signature

PRINT NAME

COMPANY

DATE

TIME

Received by: Betty WinePRINT NAME: Betty WineCOMPANY: EP1DATE: 8/16/19TIME: 0630

Relinquished by:

PRINT NAME: Michael E. L. L.COMPANY: FulcrumDATE: ✓TIME: ✓

Received by:

PRINT NAME

COMPANY

DATE

TIME

908358

SAMPLE CHAIN OF CUSTODY

ME 08-19-19

Page # 5 of 7

Report To Thom Moran, Betsy Wing

Company ERI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email thom.moran@eri-wa.com

SAMPLERS (signature)
PROJECT NAME Betsy Wing

Brookdale

PO #

74001

REMARKS

INVOICE TO

1chigo USA

TURNAROUND TIME
☐ Standard Turnaround
☒ RUSH 5 day TAT
Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-17-SW-9:0.8	41	8/16/19	0938	Soil	1								
A01-16-SW-14:1	42		0942										
DUF-97	43												
A01-17-B-13:1.5	44		0941										
A01-17-SW-10:0.8	45		0945										
A01-17-B-14:1.5	46		0948										
A01-17-SW-11:0.5	47		0953										
A01-17-B-15:1	48		0957										
A01-17-SW-13:0.5	49		1005										
A01-17-SW-12:0.5	50		1006										

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by: Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by:

Received by:

Relinquished by:

Received by:

Betsy Wing

Michael E. Clark

FBI

FBI

8/15/19

↓

0630

↓

908358

SAMPLE CHAIN OF CUSTODY

ME 08-19-19

Page # 6 of 7

Dot

Report To Thom Moran, Betsy WingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 385-8810 Email thom@epi-wa.com
betsy@epi-wa.com

SAMPLES (signature) <u>Betsy Wing</u>		PO # <u>74001</u>
PROJECT NAME <u>Brookdale</u>		INVOICE TO <u>ICWJO USA</u>
REMARKS	SAMPLE DISPOSAL: <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH 5 day TAT Rush charges authorized by: _____	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-17-B-16:1	S1	8/16/19	1009	Soil	1								X
A01-17-SW-14:0.5	S2		1016										X
DUP-98	S3												X
A01-21-SW-9:1.5	S4		1046										X
A01-21-B-13:1.5	S5		1048										X
A01-21-SW-10:1	S6		1050										X
A01-21-SW-11:1	S7		1058										X
A01-21-SW-14:2	S8		1059										X
A01-21-SW-13:2	S9		1103										X
A01-21-SW-12:1	S10		1103										X

Run per B.W. 7/30/19
Held per B.W. 8/8

Did not receive (appears to be duplicate)

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Received by: <u>Betsy Wing</u>	PRINT NAME: <u>Betsy Wing</u>	COMPANY: <u>ED1</u>	DATE: <u>8/16/19</u>	TIME: <u>0630</u>
Relinquished by: <u>Michael Eckert</u>	PRINT NAME: <u>Michael Eckert</u>	COMPANY: <u>FWR</u>	DATE: <u>1</u>	TIME: <u>1</u>
Received by:				

90853 6W 908358

SAMPLE CHAIN OF CUSTODY

ME 08-19-19

Page # 7 of 7

704

Report To Thom Moran, Betsy WingCompany EPIAddress 1180 NW Maple St. Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 308-6010 Email thom@epi-rs.com
Betsy Wing epi-rs.com

SAMPLE CHAIN OF CUSTODY PROJECT NAME <u>Brockdale</u> PO # <u>74001</u>		INVOICE TO <u>1410 US</u>
REMARKS <u>1410 US</u>		SAMPLE DISPOSAL <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>5 day 14-T</u> Rush charges authorized by:

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM				
DUP-99	6061-60	8/16/19	—	Soil	1											
A01-21-B-14:1.5	62-61		1106										X			
A01-21-SW-16:2	63-62		1107										X			
A01-21-SW-13:1	64-63		1108										X			
A01-21-B-4:2.5	65-64		1112										X			
A01-21-B-2	65		1051										X			ADDED in lab
SW-15:2													X			Run per EUB
6/26/19													X			
													X			
													X			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: <u>Betsy Wing</u> Received by: <u>Michael Enck</u>		SIGNATURE PRINT NAME COMPANY DATE TIME	
Relinquished by: <u>Betsy Wing</u> Received by: <u>Michael Enck</u>		EPI 8/16/19 0630	
Relinquished by: <u>Betsy Wing</u> Received by: <u>Michael Enck</u>		EPI 8/16/19 0630	

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
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fbi@isomedia.com
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August 30, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 908377

Dear Mr Morin:

Included are the results from the testing of material submitted on August 19, 2019 from the Brookdale 74001, F&BI 908377 project. There are 80 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Charles McFadden
EPI0830R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 19, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 908377 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
908377-01	AOI-20-SW-8:0.5
908377-02	AOI-20-SW-9:1.2
908377-03	AOI-20-B-13:2.5
908377-04	AOI-20-B-14:2
908377-05	AOI-20-SW-10:1
908377-06	AOI-20-SW-19:3
908377-07	AOI-20-SW-11:0.8
908377-08	DUP-100
908377-09	AOI-20-SW-18:3
908377-10	AOI-20-B-15:1.5
908377-11	AOI-20-SW-21:3.5
908377-12	AOI-20-SW-12:0.8
908377-13	AOI-20-B-11:4
908377-14	AOI-20-B-16:1.5
908377-15	AOI-20-SW-20:2
908377-16	AOI-20-SW-16:2
908377-17	AOI-20-SW-13:0.8
908377-18	AOI-20-SW-15:2
908377-19	AOI-20-SW-14:0.5
908377-20	DUP-101
908377-21	AOI-20-SW-17:3
908377-22	AOI-22-SW-9:1
908377-23	AOI-22-B-12:2
908377-24	AOI-22-SW-10:1
908377-25	AOI-22-SW-16:0.5
908377-26	AOI-22-SW-17:0.5
908377-27	AOI-22-SW-15:0.5
908377-28	AOI-22-SW-11:0.5
908377-29	AOI-22-SW-13:1
908377-30	AOI-22-SW-12:0.5
908377-31	AOI-22-B-13:2
908377-32	AOI-22-B-14:2
908377-33	DUP-102
908377-34	AOI-23-SW-9:0.5
908377-35	AOI-23-SW-10:0.5
908377-36	AOI-23-B-17:1.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
908377-37	AOI-23-SW-11:1
908377-38	AOI-23-SW-13:2
908377-39	AOI-23-SW-34:1
908377-40	AOI-23-SW-12:2
908377-41	AOI-23-SW-18:2
908377-42	AOI-23-SW-17:2
908377-43	AOI-23-SW-33:0.5
908377-44	AOI-23-SW-16:2
908377-45	AOI-23-B-19:1
908377-46	AOI-23-SW-15:2
908377-47	AOI-23-SW-32:0.5
908377-48	DUP-103
908377-49	AOI-23-B-21:3
908377-50	AOI-23-B-20:2
908377-51	AOI-23-SW-29:1
908377-52	DUP-104
908377-53	AOI-23-B-1:3
908377-54	AOI-23-SW-23:2
908377-55	AOI-23-SW-28:2.5
908377-56	AOI-23-SW-27:2.5
908377-57	AOI-23-SW-30:0.5
908377-58	AOI-23-B-18:1
908377-59	AOI-23-SW-20:1.5
908377-60	AOI-23-SW-24:2
908377-61	AOI-23-SW-19:1.5
908377-62	AOI-23-SW-31:1
908377-63	DUP-105
908377-64	AOI-23-B-8:4
908377-65	AOI-23-SW-26:1.5
908377-66	AOI-23-SW-25:1
908377-67	AOI-23-SW-21:1.5
908377-68	AOI-23-SW-22:1.5

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-8:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-01 1/6
Date Analyzed:	08/24/19	Data File:	082411.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-9:1.2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-02 1/6
Date Analyzed:	08/24/19	Data File:	082412.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-13:2.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-03 1/6
Date Analyzed:	08/24/19	Data File:	082413.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.058

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-14:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-04 1/6
Date Analyzed:	08/24/19	Data File:	082414.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-10:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-05 1/6
Date Analyzed:	08/24/19	Data File:	082415.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-19:3	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-06 1/6
Date Analyzed:	08/24/19	Data File:	082416.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	57	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-11:0.8	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-07 1/6
Date Analyzed:	08/24/19	Data File:	082417.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-100	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-08 1/6
Date Analyzed:	08/24/19	Data File:	082418.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	58	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-18:3	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-09 1/6
Date Analyzed:	08/24/19	Data File:	082419.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	58	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-15:1.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-10 1/6
Date Analyzed:	08/24/19	Data File:	082420.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-21:3.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-11 1/6
Date Analyzed:	08/24/19	Data File:	082407.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.014

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-12:0.8	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-12 1/6
Date Analyzed:	08/24/19	Data File:	082421.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-11:4	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-13 1/6
Date Analyzed:	08/24/19	Data File:	082422.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-16:1.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-14 1/6
Date Analyzed:	08/24/19	Data File:	082424.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-20:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-15 1/6
Date Analyzed:	08/24/19	Data File:	082425.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.047

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-16:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-16 1/6
Date Analyzed:	08/24/19	Data File:	082426.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-13:0.8	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-17 1/6
Date Analyzed:	08/24/19	Data File:	082427.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-15:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-18 1/6
Date Analyzed:	08/24/19	Data File:	082428.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.15

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-14:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-19 1/6
Date Analyzed:	08/24/19	Data File:	082429.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-101	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-20 1/6
Date Analyzed:	08/24/19	Data File:	082430.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	57	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.046

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-17:3	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-21 1/6
Date Analyzed:	08/24/19	Data File:	082431.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-SW-9:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-22 1/6
Date Analyzed:	08/24/19	Data File:	082432.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.086

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-B-12:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-23 1/6
Date Analyzed:	08/24/19	Data File:	082433.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-SW-10:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-24 1/6
Date Analyzed:	08/24/19	Data File:	082434.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-SW-16:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-25 1/6
Date Analyzed:	08/24/19	Data File:	082435.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-SW-17:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-26 1/6
Date Analyzed:	08/24/19	Data File:	082436.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-SW-15:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-27 1/6
Date Analyzed:	08/24/19	Data File:	082437.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-SW-11:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-28 1/6
Date Analyzed:	08/24/19	Data File:	082438.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-SW-13:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-29 1/6
Date Analyzed:	08/24/19	Data File:	082439.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-SW-12:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-30 1/6
Date Analyzed:	08/24/19	Data File:	082440.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.051

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-B-13:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-31 1/6
Date Analyzed:	08/26/19	Data File:	082642.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	108 ca	50	150
DBC	111	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-B-14:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-32 1/6
Date Analyzed:	08/26/19	Data File:	082645.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	109 ca	50	150
DBC	115	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-102	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-33 1/6
Date Analyzed:	08/26/19	Data File:	082646.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	108 ca	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-9:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-34 1/6
Date Analyzed:	08/28/19	Data File:	082832.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.020

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-10:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-35 1/6
Date Analyzed:	08/26/19	Data File:	082648.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	97 ca	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-17:1.2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-36 1/6
Date Analyzed:	08/26/19	Data File:	082649.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	110 ca	50	150
DBC	109	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-11:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-37 1/6
Date Analyzed:	08/26/19	Data File:	082621.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-13:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-38 1/6
Date Analyzed:	08/26/19	Data File:	082622.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-34:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-39 1/6
Date Analyzed:	08/26/19	Data File:	082623.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.61 ve

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-34:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-39 1/60
Date Analyzed:	08/28/19	Data File:	082811.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67 d	50	150
DBC	90 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.58

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-12:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-40 1/6
Date Analyzed:	08/26/19	Data File:	082624.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-18:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-41 1/6
Date Analyzed:	08/26/19	Data File:	082625.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-17:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-42 1/6
Date Analyzed:	08/26/19	Data File:	082626.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-33:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-43 1/6
Date Analyzed:	08/26/19	Data File:	082627.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.026

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-16:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-44 1/6
Date Analyzed:	08/26/19	Data File:	082628.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	106	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-19:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-45 1/6
Date Analyzed:	08/26/19	Data File:	082629.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-15:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-46 1/6
Date Analyzed:	08/26/19	Data File:	082630.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.019

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-32:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-47 1/6
Date Analyzed:	08/26/19	Data File:	082631.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-103	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-48 1/6
Date Analyzed:	08/26/19	Data File:	082632.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-21:3	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-49 1/6
Date Analyzed:	08/26/19	Data File:	082634.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-20:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-50 1/6
Date Analyzed:	08/26/19	Data File:	082620.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-29:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-51 1/6
Date Analyzed:	08/26/19	Data File:	082618.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-104	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-52 1/6
Date Analyzed:	08/26/19	Data File:	082622.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73 ca	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-1:3	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-53 1/6
Date Analyzed:	08/26/19	Data File:	082623.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80 ca	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-23:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-54 1/6
Date Analyzed:	08/26/19	Data File:	082624.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85 ca	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-28:2.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-55 1/6
Date Analyzed:	08/26/19	Data File:	082625.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	91 ca	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-27:2.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-56 1/6
Date Analyzed:	08/26/19	Data File:	082626.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	93 ca	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-30:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-57 1/6
Date Analyzed:	08/26/19	Data File:	082627.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	91 ca	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.14

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-18:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-58 1/6
Date Analyzed:	08/26/19	Data File:	082628.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	92 ca	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-20:1.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-59 1/6
Date Analyzed:	08/26/19	Data File:	082629.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	104 ca	50	150
DBC	108	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-24:2	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-60 1/6
Date Analyzed:	08/26/19	Data File:	082630.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	97 ca	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-19:1.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-61 1/6
Date Analyzed:	08/26/19	Data File:	082631.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	91 ca	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.077

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-31:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-62 1/6
Date Analyzed:	08/26/19	Data File:	082632.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87 ca	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-105	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-63 1/6
Date Analyzed:	08/26/19	Data File:	082633.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	93 ca	50	150
DBC	105	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.012

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-8:4	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-64 1/6
Date Analyzed:	08/26/19	Data File:	082634.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	94 ca	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-26:1.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-65 1/6
Date Analyzed:	08/26/19	Data File:	082635.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	103 ca	50	150
DBC	113	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.010

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-25:1	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-66 1/6
Date Analyzed:	08/26/19	Data File:	082636.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	108 ca	50	150
DBC	109	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-21:1.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-67 1/6
Date Analyzed:	08/26/19	Data File:	082637.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83 ca	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-22:1.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	908377-68 1/6
Date Analyzed:	08/26/19	Data File:	082638.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84 ca	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	09-2051 mb 1/6
Date Analyzed:	08/23/19	Data File:	082306.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	09-2053 mb 1/6
Date Analyzed:	08/24/19	Data File:	082406.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	109	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	09-2056 mb 1/6
Date Analyzed:	08/26/19	Data File:	082641.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	108 ca	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 908377
Date Extracted:	08/20/19	Lab ID:	09-2057 mb 1/6
Date Analyzed:	08/26/19	Data File:	082615.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	92	50	150
DBC	116	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/30/19

Date Received: 08/19/19

Project: Brookdale 74001, F&BI 908377

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908358-56 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	87	94	45-130	8

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	104	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/30/19

Date Received: 08/19/19

Project: Brookdale 74001, F&BI 908377

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908377-11 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.014	89	77	45-130	14

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	104	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/30/19

Date Received: 08/19/19

Project: Brookdale 74001, F&BI 908377

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908377-31 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	126	121	50-150	4

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	87	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/30/19

Date Received: 08/19/19

Project: Brookdale 74001, F&BI 908377

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908377-51 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	89	86	50-150	3

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	113	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

908377

SAMPLE CHAIN OF CUSTODY

ME 08-19-19

7 Day

Report To Thom Monin, Betsywing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 345-0310 Email thommonin@ep1-wa.com
betsywing@ep1-wa.com

SAMPLERS (signature) <u>Rebecca Baccera</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001</u>
REMARKS	INVOICE TO <u>ICWJS</u> <u>USA</u>

TURNAROUND TIME Page # <u>1</u> of <u>7</u>
<input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>5 day</u> <u>14T</u> Rush charges authorized by: _____ SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Dieldrin (method 8081)			
A01-20-SW-8:0.5	01	08/19/19	0818	Soil	1											X
A01-20-SW-9:1.2	02		0824													X
A01-20-B-13:2.5	03		0828													X
A01-20-B-14:2	04		0835													X
A01-20-SW-10:1	05		0838													X
A01-20-SW-19:3	06		0841													X
A01-20-SW-11:0.8	07		0844													X
DUP-100	08															X
A01-20-SW-18:3	09		0845													X
A01-20-B-15:1.5	10		0848													X

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Rebecca Baccera</u>	<u>EP1</u>	<u>08/19/19</u>	<u>1700</u>
Received by: <u>[Signature]</u>	<u>Michael Eckel</u>	<u>Fluke</u>	<u>8/19/19</u>	<u>1700</u>
Relinquished by:				
Received by:	Samples received at <u>3:00</u> at <u>received samples</u>			

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

908377

SAMPLE CHAIN OF CUSTODY

ME 08-19-19

Day

Report To Thom Mason, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-395 Email thom@epi-wa.com
betsey@epi-wa.com

SAMPLES (signature) <u>1284</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001</u>
REMARKS	INVOICE TO <u>1610 084</u>

TURNAROUND TIME Page # <u>2</u> of <u>7</u>	SAMPLE DISPOSAL <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>See PT</u> Rush charges authorized by: _____ <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other
--	---

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-20-SW-21:3.5	11	08/19/19	0855	Soil	1							<input checked="" type="checkbox"/>	
A01-20-SW-12:0.8	12		0858									<input checked="" type="checkbox"/>	
A01-20-B-11:4	13		0901									<input checked="" type="checkbox"/>	
A01-20-B-10:1.5	14		0902									<input checked="" type="checkbox"/>	
A01-20-SW-20:2	15		0905									<input checked="" type="checkbox"/>	
A01-20-SW-16:2	16		0906									<input checked="" type="checkbox"/>	
A01-20-SW-13:0.8	17		0908									<input checked="" type="checkbox"/>	
A01-20-SW-15:2	18		0909									<input checked="" type="checkbox"/>	
A01-20-SW-14:0.5	19		0910									<input checked="" type="checkbox"/>	
DUP-101	20											<input checked="" type="checkbox"/>	

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Rebecca Becerra</u>	<u>EPI</u>	<u>08/19/19</u>	<u>1700</u>
Received by: <u>[Signature]</u>	<u>Michael Edell</u>	<u>FIRMA</u>	<u>J</u>	<u>J</u>
Relinquished by:				
Received by:				

Samples received at 3:00

908377

SAMPLE CHAIN OF CUSTODY

MC 08-17-19 Page # 3 of 7 Doc

Report To Theresa Macari, Betty King
Company EP1
Address 1180 NW Maple St, Ste 310
City, State, ZIP Issaquah, WA 98027
Phone (425) 395-0110 Email theresa@ep1.com
mailto:theresa@ep1.com

SAMPLES (Signature) <u>[Signature]</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001</u>
REMARKS	INVOICE TO <u>Terjo USA</u>

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>Saturday</u> Rush charges authorized by: <u>[Signature]</u>	
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED								Notes	
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Field in Method 8081		
A01-20-SW-13:3	21	08/19/19	0911	Soil	1									X	
A01-22-SW-9:1	22		0930		1									X	
A01-22-B-12:2	23		0936		1									X	
A01-22-SW-10:1	24		0940		1									X	
A01-22-SW-16:0.5	25		0924		1									X	
A01-22-SW-17:0.5	26		0942		1									X	
A01-22-SW-15:0.5	27		0944		1									X	
A01-22-SW-11:0.5	28		0950		1									X	
A01-22-SW-13:1	29		0952		1									X	
A01-22-SW-12:0.5	30		0955		1									X	

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>[Signature]</u>		<u>Rebecca Becerra</u>		<u>EP1</u>		<u>08/19/19</u>		<u>1700</u>	
Received by: <u>[Signature]</u>		<u>Michael E. del</u>		<u>Terjo</u>		<u>1</u>		<u>1</u>	
Relinquished by:									
Received by:									

Samples received at 3 OC

SAMPLE CHAIN OF CUSTODY

ME 08-19-19 4 of 7 Day

Report To Thomson, Betsy Wing
 Company EP1
 Address 1180 NW Maple St, Ste 310
 City, State, ZIP Issaquah, WA 98027
 Phone (425) 395-2016 Email thomson@epi-inc.com
Betsy Wing

SAMPLES (signature) <u>Betsy Wing</u>	
PROJECT NAME <u>Brackdale</u>	PO # <u>74001</u>
REMARKS	INVOICE TO <u>Idigo USA</u>

<input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>5 day TAT</u> Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other
--	--

						ANALYSES REQUESTED								Notes
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 Dieldrin	
A01-22-B-13.2	31	08/19/19	0956	Soil	1								X	
A01-22-B-14.2	33		1000		1								X	
DUP-102	33												X	
A01-23-SW-9:0.5	34		1026		1								X	
A01-23-SW-10:0.5	35		1030		1								X	
A01-23-B-12.1.2	36		1036		1								X	
A01-23-SW-11:1	37		1040		1								X	
A01-23-SW-13:2	38		1044		1								X	
A01-23-SW-34.1	39		1050		1								X	
A01-23-SW-12:2	46		1052		1								X	

SIGNATURE		PRINT NAME		COMPANY	DATE	TIME
Relinquished by: <u>Betsy Wing</u>		<u>Rebecca Beterra</u>		<u>EP1</u>	<u>08/19/19</u>	<u>1700</u>
Received by: <u>Michael Ladd</u>		<u>Michael Ladd</u>		<u>Idigo</u>	<u>8/19/19</u>	<u>1700</u>
Relinquished by:						
Received by:						

Samples received at 3 °C

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

988327

SAMPLE CHAIN OF CUSTODY

ME 08-19-19 5 of 7 Day

Report To Thom Moring, Betsy King
Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Bellingham, WA 98027

Phone (425) 395-0010 Email thom@epi.com

SAMPLES (signature) <u>Betsy King</u>		Page # <u>5</u> of <u>7</u>
PROJECT NAME <u>Brookdale</u>	PO # <u>74001</u>	TURNAROUND TIME <u>Standard Turnaround</u> <input checked="" type="checkbox"/> RUSH <u>2 day</u> <u>14 T</u>
REMARKS	INVOICE TO <u>Relig's USA</u>	<input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>2 day</u> <u>14 T</u> Rush charges authorized by: _____
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____		

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Method 8081 Preserved			
A01-23-SW-18:2	41	08/19/19	1054	Soil	1											
A01-23-SW-17:2	42		1055													
A01-23-SW-33:0.5	43		1056													
A01-23-SW-16:2	44		1059													
A01-23-B-19:1	45		1100													
A01-23-SW-15:2	46		1101													
A01-23-SW-32:0.5	47		1106													
DAB-103	48															
A01-23-B-21:3	49		1109													
A01-23-B-20:2	50		1113													

SIGNATURE		PRINT NAME		COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>		<u>Roberta Becerra</u>				
Received by: <u>[Signature]</u>		<u>M. Kallell</u>		EP1	08/19/19	1500
Relinquished by:				EP1		
Received by:						

Samples received at 3 PM

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

908377

SAMPLE CHAIN OF CUSTODY

ME 08-09-19

Page # 16 of 7

Report To Thom Moran, Betty Wing

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-1010 Email thom@epi.com

SAMPLES (signature)
PROJECT NAME Brookdale

PO #

74001

REMARKS

INVOICE TO

Clayco USA

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 5 day 44T
Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM				
SW-29:1	51	08/19/19	1118	Soil	1											
AO1-23- SW-27-2.5	52															
DWR-104	53															
AO1-23-B SW-27-2.5	53		1119													
AO1-23-SW-23:2	54		1122													
AO1-23-SW-28:2.5	55		1124													
AO1-23-SW-27-2.5	56		1125													
AO1-23-SW-30:0.5	57		1126													
AO1-23-B-18:1	58		1130													
AO1-23-SW-20:1.5	59		1131													
AO1-23-SW-24:2	60		1132													

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Rebecca Becerra

EP1

08/19/19

Received by:

Michael Endel

Clayco

1

1

Seattle, WA 98119-2029

Ph. (206) 285-8282

Samples received at 3 °C

908377

SAMPLE CHAIN OF CUSTODY

we 08-19-19 7 of 7 Dec

Report To Thom Manning, Betsy Wang

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Seattle, WA 98107

Phone (206) 345-0010 Email thom@epi-wa.com

PROJECT NAME Brookdale

PO #

74001

REMARKS

INVOICE TO

Leija USA

TURNAROUND TIME
☒ Standard Turnaround
☒ RUSH 5 day 14T
Rush charges authorized by:

SAMPLE DISPOSAL
☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-23-SW-19:1.5	61	08/19/19	1135	Soil	1								
A01-23-SW-31:1	62		1136										
DUP-105	63												
A01-23-B-8:4	64		1222										
A01-23-SW-26:1.5	65		1223										
A01-23-SW-25:1	66		1224										
A01-23-SW-21:1.5	67		1224										
A01-23-SW-22:1.5	68		1228										

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Reinquished by: [Signature]

Rebecca Becerra

201

08/19/19 0700

Received by: [Signature]

Michael C. Lee

FIR

2

Seattle, WA 98119-2029

3012 16th Avenue West

Friedman & Bruya, Inc.

Ph. (206) 285-8282

Samples received at 2 °C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 27, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 908379

Dear Mr Morin:

Included are the results from the testing of material submitted on August 19, 2019 from the Brookdale 74001, F&BI 908379 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Charles McFadden
EPI0827R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 19, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 908379 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
908379-01	AOI-4-SW-33:0.5
908379-02	AOI-12-B-19:1.5

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-SW-33:0.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908379
Date Extracted:	08/20/19	Lab ID:	908379-01 1/6
Date Analyzed:	08/26/19	Data File:	082616.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-12-B-19:1.5	Client:	Environmental Partners
Date Received:	08/19/19	Project:	Brookdale 74001, F&BI 908379
Date Extracted:	08/20/19	Lab ID:	908379-02 1/6
Date Analyzed:	08/26/19	Data File:	082617.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 908379
Date Extracted:	08/20/19	Lab ID:	09-2057 mb 1/6
Date Analyzed:	08/26/19	Data File:	082615.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	92	50	150
DBC	116	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/19

Date Received: 08/19/19

Project: Brookdale 74001, F&BI 908379

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908377-51 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	89	86	50-150	3

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	113	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Page # of 1001

Page # 22-19 of 100

TURNAROUND TIME

☐ Standard Turnaround

☐ RUSH 5 day T+T

Rush charges authorized by: _____

SAMPLE DISPOSAL



☐ Dispose after 30 days

☒ Archive Samples

☐ Other _____

[illegible]

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Betsy Dwy	EP1	12/19/19	1:00
Received by: 	Michael Eckel	Fish	12/19/19	1:00
Relinquished by:				
Received by:				
Samples received at 3				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 3, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 908404

Dear Mr Morin:

Included are the results from the testing of material submitted on August 20, 2019 from the Brookdale 74001, F&BI 908404 project. There are 83 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Charles McFadden
EPI0903R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 20, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 908404 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
908404-01	AOI-19-SW-5:0.5
908404-02	AOI-19-SW-6:0.5
908404-03	DUP-106
908404-04	AOI-19-SW-12:2
908404-05	AOI-19-B-5:1.5
908404-06	AOI-19-SW-11:2
908404-07	AOI-19-SW-10:2
908404-08	AOI-19-B-6:1.5
908404-09	AOI-19-SW-9:0.5
908404-10	AOI-19-SW-7:1
908404-11	AOI-19-SW-8:0.8
908404-12	AOI-19-B-7:1.5
908404-13	AOI-18-SW-11:1.2
908404-14	DUP-107
908404-15	AOI-18-B-15:2
908404-16	AOI-18-SW-10:1.5
908404-17	AOI-18-B-17:4
908404-18	AOI-18-B-14:1.5
908404-19	AOI-18-SW-9:1
908404-20	DUP-108
908404-21	AOI-18-B-2:4
908404-22	AOI-18-SW-8:1
908404-23	AOI-18-SW-14:2.5
908404-24	AOI-18-SW-13:2.5
908404-25	AOI-18-B-16:2
908404-26	AOI-18-SW-12:1
908404-27	AOI-18-SW-16:2.5
908404-28	AOI-18-SW-13:1.5
908404-29	AOI-18-SW-15:2.5
908404-30	AOI-18-SW-17:1.5
908404-31	AOI-18-SW-18:1.5
908404-32	AOI-18-SW-19:1.5
908404-33	AOI-24-SW-14:1.5
908404-34	AOI-24-SW-13:1
908404-35	AOI-24-SW-12:1
908404-36	AOI-24-SW-15:1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
908404-37	AOI-24-B-8:2
908404-38	AOI-24-SW-11:1
908404-39	AOI-24-B-9:2
908404-40	AOI-24-SW-10:0.8
908404-41	AOI-24-SW-9:1
908404-42	AOI-24-SW-16:1
908404-43	AOI-24-B-7:1.5
908404-44	AOI-25-SW-8:1.5
908404-45	DUP-109
908404-46	AOI-25-SW-18:1
908404-47	AOI-25-B-15:2
908404-48	AOI-25-SW-17:1
908404-49	AOI-25-SW-9:1
908404-50	AOI-25-B-17:2
908404-51	AOI-25-SW-15:0.8
908404-52	AOI-25-SW-14:1.5
908404-53	DUP-110
908404-54	DUP-111
908404-55	AOI-25-SW-13:1.5
908404-56	AOI-25-SW-12:1
908404-57	AOI-25-SW-10:1.5
908404-58	AOI-25-B-16:2
908404-59	AOI-25-SW-11:1.5
908404-60	AOI-25-SW-19:3
908404-61	AOI-25-B-9:4
908404-62	AOI-25-SW-24:3
908404-63	AOI-25-B-6:4
908404-64	AOI-25-SW-25:3
908404-65	AOI-25-SW-26:3
908404-66	AOI-25-SW-23:2.5
908404-67	AOI-25-B-10:4
908404-68	AOI-25-SW-22:2.5
908404-69	AOI-25-SW-21:2.5
908404-70	AOI-25-SW-20:3

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-SW-5:0.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-01 1/6
Date Analyzed:	08/26/19	Data File:	082617.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-SW-6:0.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-02 1/6
Date Analyzed:	08/27/19	Data File:	082635.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-106	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-03 1/6
Date Analyzed:	08/27/19	Data File:	082636.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-SW-12:2	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-04 1/6
Date Analyzed:	08/27/19	Data File:	082637.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-B-5:1.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-05 1/6
Date Analyzed:	08/27/19	Data File:	082638.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-SW-11:2	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-06 1/6
Date Analyzed:	08/27/19	Data File:	082639.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	105	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-SW-10:2	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-07 1/6
Date Analyzed:	08/27/19	Data File:	082640.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-B-6:1.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-08 1/6
Date Analyzed:	08/27/19	Data File:	082641.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-SW-9:0.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-09 1/6
Date Analyzed:	08/27/19	Data File:	082642.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.12

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-SW-7:1	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-10 1/6
Date Analyzed:	08/27/19	Data File:	082643.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.014

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-SW-8:0.8	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-11 1/60
Date Analyzed:	08/28/19	Data File:	082810.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72 d	50	150
DBC	99 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-B-7:1.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-12 1/6
Date Analyzed:	08/27/19	Data File:	082645.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-SW-11:1.2	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-13 1/6
Date Analyzed:	08/27/19	Data File:	082646.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-107	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-14 1/6
Date Analyzed:	08/27/19	Data File:	082647.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-B-15:2	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-15 1/6
Date Analyzed:	08/27/19	Data File:	082648.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-SW-10:1.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-16 1/6
Date Analyzed:	08/27/19	Data File:	082649.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-B-17:4	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-17 1/6
Date Analyzed:	08/27/19	Data File:	082650.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-B-14:1.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-18 1/6
Date Analyzed:	08/27/19	Data File:	082707.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-SW-9:1	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-19 1/6
Date Analyzed:	08/27/19	Data File:	082708.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.024

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-108	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-20 1/6
Date Analyzed:	08/27/19	Data File:	082709.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-B-2:4	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-21 1/6
Date Analyzed:	08/27/19	Data File:	082710.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.019

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-SW-8:1	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-22 1/6
Date Analyzed:	08/27/19	Data File:	082713.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-SW-14:2.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-23 1/6
Date Analyzed:	08/27/19	Data File:	082714.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-SW-13:2.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-24 1/6
Date Analyzed:	08/27/19	Data File:	082715.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	51	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-B-16:2	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-25 1/6
Date Analyzed:	08/27/19	Data File:	082716.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-SW-12:1	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-26 1/6
Date Analyzed:	08/27/19	Data File:	082717.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-SW-16:2.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-27 1/6
Date Analyzed:	08/27/19	Data File:	082718.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-SW-13:1.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-28 1/6
Date Analyzed:	08/27/19	Data File:	082719.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-SW-15:2.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-29 1/6
Date Analyzed:	08/27/19	Data File:	082720.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-SW-17:1.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-30 1/6
Date Analyzed:	08/27/19	Data File:	082721.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-SW-18:1.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/28/19	Lab ID:	908404-31 1/6
Date Analyzed:	08/29/19	Data File:	082943.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL/VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.017

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-18-SW-19:1.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-32 1/6
Date Analyzed:	08/27/19	Data File:	082723.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-SW-14:1.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-33 1/6
Date Analyzed:	08/27/19	Data File:	082729A.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-SW-13:1	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-34 1/6
Date Analyzed:	08/27/19	Data File:	082730.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-SW-12:1	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-35 1/6
Date Analyzed:	08/27/19	Data File:	082731.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-SW-15:1	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/28/19	Lab ID:	908404-36 1/6
Date Analyzed:	08/29/19	Data File:	082944.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL/VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-B-8:2	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-37 1/6
Date Analyzed:	08/27/19	Data File:	082733.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-SW-11:1	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-38 1/6
Date Analyzed:	08/27/19	Data File:	082734.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	105	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-B-9:2	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-39 1/6
Date Analyzed:	08/27/19	Data File:	082735.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-SW-10:0.8	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-40 1/6
Date Analyzed:	08/27/19	Data File:	082736.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	108	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-SW-9:1	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-41 1/6
Date Analyzed:	08/27/19	Data File:	082715.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-SW-16:1	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-42 1/6
Date Analyzed:	08/27/19	Data File:	082718.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.060

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-24-B-7:1.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-43 1/6
Date Analyzed:	08/27/19	Data File:	082719.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-8:1.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-44 1/6
Date Analyzed:	08/27/19	Data File:	082720.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-109	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-45 1/6
Date Analyzed:	08/27/19	Data File:	082721.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-18:1	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-46 1/6
Date Analyzed:	08/27/19	Data File:	082722.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-15:2	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-47 1/6
Date Analyzed:	08/27/19	Data File:	082723.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-17:1	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-48 1/6
Date Analyzed:	08/27/19	Data File:	082724.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.044

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-9:1	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-49 1/6
Date Analyzed:	08/27/19	Data File:	082725.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-17:2	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-50 1/6
Date Analyzed:	08/27/19	Data File:	082726.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.018

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-15:0.8	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-51 1/6
Date Analyzed:	08/27/19	Data File:	082745.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-14:1.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-52 1/6
Date Analyzed:	08/27/19	Data File:	082746.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-110	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-53 1/6
Date Analyzed:	08/27/19	Data File:	082747.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-111	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-54 1/6
Date Analyzed:	08/27/19	Data File:	082748.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-13:1.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-55 1/6
Date Analyzed:	08/27/19	Data File:	082749.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-12:1	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-56 1/6
Date Analyzed:	08/27/19	Data File:	082733.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-10:1.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-57 1/6
Date Analyzed:	08/27/19	Data File:	082734.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-16:2	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-58 1/6
Date Analyzed:	08/27/19	Data File:	082735.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-11:1.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-59 1/6
Date Analyzed:	08/27/19	Data File:	082736.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-19:3	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-60 1/6
Date Analyzed:	08/27/19	Data File:	082737.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-9:4	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	908404-61 1/6
Date Analyzed:	08/24/19	Data File:	082351.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-24:3	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-62 1/6
Date Analyzed:	08/28/19	Data File:	082738.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-6:4	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-63 1/6
Date Analyzed:	08/28/19	Data File:	082739.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-25:3	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-64 1/6
Date Analyzed:	08/28/19	Data File:	082740.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-26:3	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-65 1/6
Date Analyzed:	08/28/19	Data File:	082741.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.033

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-23:2.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-66 1/6
Date Analyzed:	08/28/19	Data File:	082742.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-10:4	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-67 1/6
Date Analyzed:	08/28/19	Data File:	082743.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-22:2.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-68 1/6
Date Analyzed:	08/28/19	Data File:	082744.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.010

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-21:2.5	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-69 1/6
Date Analyzed:	08/28/19	Data File:	082745.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.034

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-20:3	Client:	Environmental Partners
Date Received:	08/20/19	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/22/19	Lab ID:	908404-70 1/6
Date Analyzed:	08/28/19	Data File:	082746.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	09-2066 mb 1/6
Date Analyzed:	08/26/19	Data File:	082616.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	106	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	09-2067 mb 1/6
Date Analyzed:	08/27/19	Data File:	082706.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	108	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	09-2068 mb 1/6
Date Analyzed:	08/27/19	Data File:	082714.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	88	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/21/19	Lab ID:	09-2069 mb 1/6
Date Analyzed:	08/24/19	Data File:	082350.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 908404
Date Extracted:	08/28/19	Lab ID:	09-2128 mb 1/6
Date Analyzed:	08/29/19	Data File:	082937.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL/VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/19

Date Received: 08/20/19

Project: Brookdale 74001, F&BI 908404

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908404-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	74	80	45-130	8

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	91	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/19

Date Received: 08/20/19

Project: Brookdale 74001, F&BI 908404

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908404-21 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.018	96	106	45-130	10

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	90	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/19

Date Received: 08/20/19

Project: Brookdale 74001, F&BI 908404

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908404-41 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	89	88	50-150	1

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	99	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/19

Date Received: 08/20/19

Project: Brookdale 74001, F&BI 908404

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908404-61 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	94	96	45-130	2

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	102	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/19

Date Received: 08/20/19

Project: Brookdale 74001, F&BI 908404

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908499-19 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.090	67 b	55 b	45-130	20 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

ME 08-20-19

Page # 1 of 7

90804 908404

Report To Thom Mann, Betsy Wing

Company EP1

Address 1186 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 315-0010 Email thom@epi-wa.com

betsyw@epi-wa.com

SAMPLERS (signature) Rebecca Beerna

PO #

PROJECT NAME
Brookdale

74001

REMARKS

INVOICE TO
Idaho USA

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 5 day TAT
Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-19-SW-5:05	01	08/20/19	0841	Soil	1								
A01-19-SW-6:05	02		0845										
DUP-106	03												
A01-19-SW-12:2	04		0846										
A01-19-B-5:15	05		0849										
A01-19-SW-11:2	06		0850										
A01-19-SW-10:2	07		0852										
A01-19-B-6:15	08		0853										
A01-19-SW-9:05	09		0854										
A01-19-SW-7:1	10		0857										

Samples received at 5:00

SIGNATURE

Relinquished by:

PRINT NAME

COMPANY

DATE TIME

Rebecca Beerna

Michael Edell

EP1

8/20/19 1:00

Seattle, WA 98119-2029

Ph. (206) 285-8282

Received by:

908404

SAMPLE CHAIN OF CUSTODY

ME 08-20-19

Page # 2 of 2
204 7

Report To Tham Min; Betsy Wang

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email tham@epi-wa.com
betsy@epi-wa.com

SAMPLERS (signature) <u>NTA</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001</u>
REMARKS	INVOICE TO <u>Idiyo USA</u>

TURNAROUND TIME <u>Standard Turnaround</u> <u>GRUSH 5 day TAT</u> Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other
--	--

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Dieldrin (method 8081)			
A01-19-SW-8-0.3	11	8/19/19	0858	soil	1								X			
A01-19-B-7-1.5	12		0900										X			
A01-18-SW-11-1.2	13		0906										X			
DUP-107	14												X			
A01-18-B-15-2	15		0912										X			
A01-18-SW-10-1.5	16		0914										X			
A01-18-B-17-4	17		0919										X			
A01-18-B-14-1.5	18		0920										X			
A01-18-SW-9-1	19		0922										X			
DUP-108	20												X			

Samples received at 5 °C

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>[Signature]</u>		<u>Rebecca Becerra</u>		<u>EPI</u>		<u>08/20/19</u>		<u>1700</u>	
Received by: <u>[Signature]</u>		<u>Michael Ellis</u>		<u>FIR</u>		<u>4</u>		<u>2</u>	
Relinquished by:									
Received by:									

Friedman & Bruyno, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

908404

SAMPLE CHAIN OF CUSTODY

ME 08-20-19

Page #

3 of 7

Report To Tom Marin, Betsy WangCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (206) 395-0910 Email tom@ep1-wa.combetsywang@ep1-wa.comSAMPLERS (signature) Rebecca

PROJECT NAME

PO #

REMARKS

INVOICE TO

Brookdale34001

TURNAROUND TIME

☐ Standard Turnaround

☒ BRUSH 5 day TAT

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-18-B-2:4	21	08/20/2019	0923	Soil	1							X	Samples received at 5°C
A01-18-SW-8:1	22		0924									X	
A01-18-SW-14:2.5	23		0929									X	
A01-18-SW-13:2.5	24		0935									X	
A01-18-B-16:2	25		0936									X	
A01-18-SW-12:1	26		0938									X	
A01-18-SW-16:2.5	27		0939									X	
A01-18-SW-13:1.5	28		0940									X	
A01-18-SW-15:2.5	29		0943									X	
A01-18-SW-17:1.5	30		0946									X	

Samples received at 5°C

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bryna, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Received by:

Rebecca Becerra

EP1

08/20/19 1700

Received by:

Michael Endin

F16m

1

6

Received by:

908404

SAMPLE CHAIN OF CUSTODY

ME08-20-19

Page # 4 of 2047

Report To Thom Wain, Betsy Wang

Company SLI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0000 Email thom.wain@sl-inc.com

Betsy Wang

SAMPLERS (signature)		PO #	
<u>[Signature]</u>		74081	
PROJECT NAME		INVOICE TO	
<u>Brookdale</u>		<u>Idig's USA</u>	
REMARKS			

TURNAROUND TIME	
<input type="checkbox"/> Standard Turnaround	
<input checked="" type="checkbox"/> RUSH 5 day - 7AT	
Rush charges authorized by:	
<u>[Signature]</u>	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	
<input checked="" type="checkbox"/> Archive Samples	
<input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-B-SW-18-1:5	31	08/20/19	0953	Soil	1								X
A01-B-SW-19-1:5	32		0957										X
A01-24-SW-14-1:5	33		1009										X
A01-24-SW-13:1	34		1010										X
A01-24-SW-12:1	35		1012										X
A01-24-SW-15:1	36		1013										X
A01-24-B-8:2	37		1014										X
A01-24-SW-11:1	38		1016										X
A01-24-B-9:2	39		1017										X
A01-24-SW-10:0.3	40		1023										X

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
<u>[Signature]</u>		Rebecca Becerra		SLI		08/20/19		1700	
Relinquished by:		Michael Leal		FCA					
Received by:									

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

908404

SAMPLE CHAIN OF CUSTODY

ME 08-20-19

Page # 5 of 2047

Report To Therma Environmental, Betsy WingCompany EPIAddress 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 375-0000 Email therma@epi-wa.combetsy@epi-wa.comSAMPLERS (signature) [Signature]

PROJECT NAME

PO #

REMARKS

Bedlake74001

INVOICE TO

Idijs USA

TURNAROUND TIME

☐ Standard Turnaround☒ RUSH 5 day TATRush charges authorized by: [Signature]

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

TPH-HCID	
TPH-Diesel	
TPH-Gasoline	
BTEX by 8021B	
VOCs by 8260C	
SVOCs by 8270D	
PAHs 8270D SIM	
Dieldrin (Method 8081)	

Notes

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Dieldrin (Method 8081)	Notes
A01-24-SW-9:1	41	8/20/19	1024	Soil	1								X	
A01-24-SW-16:1	42		1025										X	
A01-24-B-7:1.5	43		1026										X	
A01-25-SW-8:1.5	44		1045										X	
DWP-109	45		-										X	
A01-25-SW-18:1	46		1124										X	
A01-25-B-15:2	47		1125										X	
A01-25-SW-17:1	48		1126										X	
A01-25-SW-9:1	49		1129										X	
A01-25-B-14:2	50		1130										X	

Samples received at 5°C

SIGNATURE

PRINT NAME

COMPANY

DATE TIME

Friedman & Bryna, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: [Signature]

Rebecca Bacerra

EPI

8/20/19 1:00

Received by: [Signature]

Michael Facki

TTR

✓

Received by:

908404

SAMPLE CHAIN OF CUSTODY

ME 08-20-19

Report To

Thom Morin, Betsy Wling

Company 1180 NW Maple St, Ste 310

Address FE PI

City, State, ZIP Ksarah, WA 98007

Phone (425) 395- Email thom@betsy-wling.com

CBLD betsywling@betsy-wling.com

SAMPLES (Signature)

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO

Lehigh
USA

Page #

6 of 2047

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 5 day PPT
 Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-25-SW-15:0.8	51	08/20/19	1132	Soil	1								X
A01-25-SW-14:1.5	52		1136										X
DUP-110	53												X
DUP-111	54												X
A01-25-SW-13:1.5	55		1146										X
A01-25-SW-12:1	56		1148										X
A01-25-SW-10:1.5	57		1149										X
A01-25-B-16:2	58		1150										X
A01-25-SW-11:1.5	59		1153										X
A01-25-SW-19:3	60		1156										X

Samples received at 5:00

SIGNATURE

Relinquished by:

Betsy Wling

PRINT NAME

Rebecca Becerra

COMPANY

E01

DATE

08/20/19

TIME

1:00

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029

Ph. (206) 285-8282

Received by:

Michael E. Call

Michael E. Call

COMPANY

FEB

DATE

08/20/19

TIME

1:00

908464

SAMPLE CHAIN OF CUSTODY

ME 08-20-19

Report To Thom Marin; Betsy Wing

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0810 Email thom@epi-wa.com
betsy@epi-wa.com

Page # 1 of 2

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 5 day TKT
Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

PROJECT NAME

Brookdale

PO #

74001

REMARKS

INVOICE TO
Idi jo
USA

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Dieldrin (method 8081)			
A01-25-B-9:4	61	8/20/19	1158	soil	1								X			
A01-25-SW-24:3	62		1159										X			
A01-25-B-6:4	63		1200										X			
A01-25-SW-25:3	64		1203										X			
A01-25-SW-24:3	65		1207										X			
A01-25-SW-23:2.5	66		1210										X			
A01-25-B-10:4	67		1211										X			
A01-25-SW-22:2.5	68		1212										X			
A01-25-SW-21:2.5	69		1214										X			Samples received at <u>5</u> °C
A01-25-SW-20:3	78		1215										X			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE

Relinquished by:

[Signature]

PRINT NAME

Rebecca Becerra

COMPANY

EP1

DATE

8/20/19

TIME

1700

Received by:

Michelle Ali

FIR

Received by:

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 30, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 908438

Dear Mr Morin:

Included are the results from the testing of material submitted on August 22, 2019 from the Brookdale 74001, F&BI 908438 project. There are 71 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Charles McFadden
EPI0830R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 22, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 908438 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
908438-01	AOI-5-SW-12:1
908438-02	AOI-5-SW-10:1.5
908438-03	DUP-112
908438-04	AOI-26-SW-24:1.5
908438-05	AOI-26-SW-25:1.5
908438-06	AOI-26-SW-26:1.5
908438-07	AOI-26-SW-13:1
908438-08	AOI-26-SW-14:1
908438-09	AOI-26-SW-16:1
908438-10	AOI-26-SW-17:1
908438-11	AOI-26-SW-18:1
908438-12	AOI-26-SW-19:0.5
908438-13	AOI-26-SW-20:0.5
908438-14	AOI-26-SW-21:0.5
908438-15	AOI-26-SW-22:0.5
908438-16	AOI-26-SW-23:1.5
908438-17	AOI-26-SW-8:0.8
908438-18	AOI-26-SW-9:0.5
908438-19	AOI-26-B-18:1.2
908438-20	AOI-26-B-13:1
908438-21	AOI-26-B-17:1
908438-22	AOI-26-B-16:1
908438-23	AOI-26-SW-10:0.5
908438-24	AOI-26-B-15:1
908438-25	AOI-26-B-14:1
908438-26	AOI-26-SW-11:0.5
908438-27	AOI-26-SW-15:0.8
908438-28	AOI-26-SW-12:0.5
908438-29	AOI-27-SW-21:1.2
908438-30	AOI-27-SW-16:0.5
908438-31	AOI-27-B-10:3.5
908438-32	AOI-27-SW-20:1
908438-33	DUP-113
908438-34	DUP-114
908438-35	AOI-27-SW-19:0.8
908438-36	AOI-27-SW-17:0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (DRAFT)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
908438-37	AOI-27-B-23:1
908438-38	AOI-27-SW-18:0.8
908438-39	AOI-27-SW-37:1.8
908438-40	AOI-27-SW-36:1.8
908438-41	AOI-27-SW-35:1
908438-42	DUP-115
908438-43	AOI-27-SW-34:0.5
908438-44	AOI-27-B-26:1
908438-45	AOI-27-SW-33:0.5
908438-46	AOI-27-B-27:1
908438-47	AOI-27-SW-32:0.5
908438-48	DUP-116
908438-49	AOI-27-SW-29:1
908438-50	AOI-27-SW-28:1.5
908438-51	AOI-27-SW-30:1
908438-52	AOI-27-SW-27:1.5
908438-53	AOI-27-SW-25:1
908438-54	AOI-27-SW-31:1.2
908438-55	AOI-27-SW-24:0.8
908438-56	AOI-27-SW-26:1
908438-57	AOI-27-B-25:1.5
908438-58	AOI-27-SW-22:0.5
908438-59	AOI-27-SW-23:0.5
908438-60	AOI-27-B-24:1

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-SW-12:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-01 1/6
Date Analyzed:	08/27/19	Data File:	082737.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-SW-10:1.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-02 1/120
Date Analyzed:	08/29/19	Data File:	082911A.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73 d	50	150
DBC	76 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	2.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-112	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-03 1/6
Date Analyzed:	08/27/19	Data File:	082739.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-24:1.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-04 1/6
Date Analyzed:	08/27/19	Data File:	082743.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-25:1.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-05 1/6
Date Analyzed:	08/27/19	Data File:	082740.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-26:1.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-06 1/6
Date Analyzed:	08/27/19	Data File:	082741.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-13:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-07 1/6
Date Analyzed:	08/27/19	Data File:	082742.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-14:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-08 1/6
Date Analyzed:	08/28/19	Data File:	082754.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-16:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-09 1/6
Date Analyzed:	08/28/19	Data File:	082755.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.047

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-17:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-10 1/6
Date Analyzed:	08/28/19	Data File:	082756.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-18:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-11 1/6
Date Analyzed:	08/28/19	Data File:	082757.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-19:0.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-12 1/6
Date Analyzed:	08/28/19	Data File:	082758.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-20:0.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-13 1/6
Date Analyzed:	08/28/19	Data File:	082759.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.059

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-21:0.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-14 1/6
Date Analyzed:	08/28/19	Data File:	082760.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-22:0.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-15 1/6
Date Analyzed:	08/28/19	Data File:	082761.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.079

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-23:1.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-16 1/6
Date Analyzed:	08/28/19	Data File:	082762.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-8:0.8	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-17 1/6
Date Analyzed:	08/28/19	Data File:	082812.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-9:0.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-18 1/6
Date Analyzed:	08/28/19	Data File:	082813.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.021

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-18:1.2	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-19 1/6
Date Analyzed:	08/28/19	Data File:	082814.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.011

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-13:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-20 1/6
Date Analyzed:	08/28/19	Data File:	082815.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-17:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-21 1/6
Date Analyzed:	08/28/19	Data File:	082816.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-16:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-22 1/6
Date Analyzed:	08/28/19	Data File:	082817.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-10:0.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-23 1/6
Date Analyzed:	08/28/19	Data File:	082818.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.023

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-15:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-24 1/6
Date Analyzed:	08/28/19	Data File:	082832.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-14:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-25 1/6
Date Analyzed:	08/28/19	Data File:	082833.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-11:0.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-26 1/6
Date Analyzed:	08/28/19	Data File:	082834.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-15:0.8	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-27 1/6
Date Analyzed:	08/28/19	Data File:	082835.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.14

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-12:0.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-28 1/6
Date Analyzed:	08/28/19	Data File:	082807.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.21

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-21:1.2	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-29 1/6
Date Analyzed:	08/28/19	Data File:	082836.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-16:0.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-30 1/6
Date Analyzed:	08/28/19	Data File:	082837.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.090

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-10:3.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-31 1/6
Date Analyzed:	08/28/19	Data File:	082838.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-20:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-32 1/6
Date Analyzed:	08/28/19	Data File:	082839.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-113	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-33 1/6
Date Analyzed:	08/28/19	Data File:	082840.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.059

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-114	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-34 1/6
Date Analyzed:	08/28/19	Data File:	082841.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-19:0.8	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-35 1/6
Date Analyzed:	08/28/19	Data File:	082842.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-17:0.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-36 1/6
Date Analyzed:	08/28/19	Data File:	082843.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-23:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-37 1/6
Date Analyzed:	08/28/19	Data File:	082844.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-18:0.8	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-38 1/6
Date Analyzed:	08/28/19	Data File:	082845.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-37:1.8	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-39 1/6
Date Analyzed:	08/28/19	Data File:	082846.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-36:1.8	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-40 1/6
Date Analyzed:	08/28/19	Data File:	082847.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.029

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-35:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-41 1/6
Date Analyzed:	08/28/19	Data File:	082848.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.28

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-115	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-42 1/6
Date Analyzed:	08/28/19	Data File:	082849.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-34:0.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-43 1/6
Date Analyzed:	08/28/19	Data File:	082850.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.092

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-26:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-44 1/6
Date Analyzed:	08/29/19	Data File:	082852.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.010

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-33:0.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-45 1/6
Date Analyzed:	08/29/19	Data File:	082853.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.23

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-27:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-46 1/6
Date Analyzed:	08/29/19	Data File:	082854.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-32:0.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-47 1/6
Date Analyzed:	08/29/19	Data File:	082855.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-116	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-48 1/6
Date Analyzed:	08/28/19	Data File:	082835.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	73	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-29:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-49 1/6
Date Analyzed:	08/28/19	Data File:	082838.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	63	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-28:1.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-50 1/6
Date Analyzed:	08/28/19	Data File:	082839.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	59	50	150
DBC	57	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.067

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-30:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-51 1/6
Date Analyzed:	08/28/19	Data File:	082840.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	56	50	150
DBC	67	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.037

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-27:1.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-52 1/6
Date Analyzed:	08/28/19	Data File:	082841.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.14

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-25:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-53 1/6
Date Analyzed:	08/28/19	Data File:	082842.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-31:1.2	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-54 1/6
Date Analyzed:	08/28/19	Data File:	082843.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.084

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-24:0.8	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-55 1/6
Date Analyzed:	08/28/19	Data File:	082844.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.014

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-26:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-56 1/6
Date Analyzed:	08/28/19	Data File:	082845.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	70	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-25:1.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-57 1/6
Date Analyzed:	08/28/19	Data File:	082846.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	68	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.17

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-22:0.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-58 1/6
Date Analyzed:	08/28/19	Data File:	082847.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-23:0.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-59 1/6
Date Analyzed:	08/28/19	Data File:	082848.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	69	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.016

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-24:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	908438-60 1/6
Date Analyzed:	08/28/19	Data File:	082849.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	66	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	09-2069 mb2 1/6
Date Analyzed:	08/28/19	Data File:	082747.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	88	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	09-2078 mb 1/6
Date Analyzed:	08/27/19	Data File:	082750.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/22/19	Lab ID:	09-2079 mb 1/6
Date Analyzed:	08/28/19	Data File:	082806.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	112	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 908438
Date Extracted:	08/23/19	Lab ID:	09-2080 mb 1/6
Date Analyzed:	08/28/19	Data File:	082834.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/30/19

Date Received: 08/22/19

Project: Brookdale 74001, F&BI 908438

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908404-61 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	94	96	45-130	2

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	102	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/30/19

Date Received: 08/22/19

Project: Brookdale 74001, F&BI 908438

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908438-08 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	86	84	45-130	2

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	91	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/30/19

Date Received: 08/22/19

Project: Brookdale 74001, F&BI 908438

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908438-28 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.20	96 b	57 b	45-130	51 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	96	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/30/19

Date Received: 08/22/19

Project: Brookdale 74001, F&BI 908438

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908438-48 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	75	72	50-150	4

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	88	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

908438

SAMPLE CHAIN OF CUSTODY

ME 08-22-19

16 Day

Report To Incon Marin, Ketsy Wang

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0810 Email thom@epi-wa.com

Ketsy Wang

SAMPLERS (signature) <u>Rebecca Beerna</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001</u>
REMARKS	INVOICE TO <u>1 chigo USA</u>

TURNAROUND TIME Page # <u>1</u> of <u>6</u>
<input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>5 day TAT</u> Rush charges authorized by:
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
AO1-26-5-SW-12:1	01	08/21/19	0900	Soil	1							X	
AO1-26-5-SW-10:1.5	02		0910		1							X	
DUP-112	03											X	
AO1-26-SW-24:1.5	04		0924		1							X	
AO1-26-SW-25:1.5	05		0933		1							X	
AO1-26-SW-26:1.5	06		0935		1							X	
AO1-26-SW-13:1	07		0940		1							X	
AO1-26-SW-14:1	08		0944		1							X	
AO1-26-SW-16:1	09		0940		1							X	
AO1-26-SW-17:1	10		0949		1							X	

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <u>Rebecca Beerna</u>		<u>Rebecca Beerna</u>		<u>EPI</u>		08/21/19	1700
Received by: <u>[Signature]</u>		<u>Michael Edsall</u>		<u>FIR</u>		1	1
Relinquished by:							
Received by:				<u>Samples received at</u>		<u>3</u>	<u>00</u>

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

908438

SAMPLE CHAIN OF CUSTODY

ME 08-22-19

Page # 2 of 10

Report To Thom Martin; Betsy WileyCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (206) 395-0010 Email thom@ep1-wa.com
betsy@ep1-wa.com

SAMPLES (signature) <u>Nicole Becerra</u>	
PROJECT NAME	PO #
<u>Brookdale</u>	<u>34001</u>
REMARKS	INVOICE TO
	<u>1chijio</u>
	<u>USA</u>

TURNAROUND TIME
Standard Turnaround
<input checked="" type="checkbox"/> RUSH <u>5 day</u> <u>747</u>
Rush charges authorized by:
SAMPLE DISPOSAL
<input type="checkbox"/> Dispose after 30 days
<input checked="" type="checkbox"/> Archive Samples
<input type="checkbox"/> Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-210-SW-18:1	11	08/21/19	0951	Soil	1								X
A01-210-SW-19:0.5	12		0955										X
A01-210-SW-20:0.5	13		1000										X
A01-210-SW-21:0.5	14		1003										X
A01-210-SW-22:0.5	15		1005										X
A01-210-SW-23:1.5	16		1009										X
A01-210-SW-8:0.8	17		1010										X
A01-210-SW-9:0.5	18		1014										X
A01-210-B-18:1.2	19		1015										X
A01-210-B-13:1	20		1018										X

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Reinquished by:	<u>Nicole Becerra</u>	Reinquished by:	<u>Michael E. Dell</u>	Received by:	
Received by:	<u>Michael E. Dell</u>	Received by:	<u>Michael E. Dell</u>	Received by:	

908438

SAMPLE CHAIN OF CUSTODY

Me 08-22-19

3 of 6 Pgs

Report To Thom Morin, Betsy KingCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98037Phone (425) 395-1010 Email thom.morin@epi-wa.comBetsy King - wa.com

SAMPLERS (signature)

PROJECT NAME

PO #

Brookdale

REMARKS

INVOICE TO

IchijoUSA

Page #

3 of 6

TURNAROUND TIME

Standard Turnaround

RUSH 5 day TAT

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Dieldrin (Method 808)	Notes
A01-26-B-17:1	21	08/21/19	1019	Soil	1								X	
A01-26-B-16:1	22		1021		1								X	
A01-26-SW-10:0.5	23		1022		1								X	
A01-26-B-15:1	24		1025		1								X	
A01-26-B-14:1	25		1026		1								X	
A01-26-SW-11:0.5	26		1028		1								X	
A01-26-SW-15:0.8	27		1030		1								X	
A01-26-SW-12:0.5	28		1045		1								X	
A01-27-SW-21:1.2	29		1111		1								X	
A01-27-SW-16:0.5	30		1114		1								X	

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Brynga, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: Rebecca Becerra

Rebecca Becerra

EP1

08/21/19 1700

Received by: Michael E. Caldwell

Michael E. Caldwell

FR

1

✓

Relinquished by:

Received by:

908438

SAMPLE CHAIN OF CUSTODY

ME 08-22-19

4 of 6 Doc

Report To Therm Marin, Betsy Wing

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email therm@epi-wa.com

betsy@epi-wa.com

SAMPLERS (signature) <u>Rebecca Beerra</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001</u>
REMARKS	INVOICE TO <u>Tenjo USA</u>

Page # <u>4</u> of <u>6</u> TURNAROUND TIME <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>5 day TAT</u> Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other
--	--

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-27-B-10:3,5	31	08/21/19	1115	Soil	1								X
A01-27-SW-20:1	32		1117		1								X
DUP-113	33												X
DUP-114	34												X
A01-27-SW-19:0.8	35		1121										X
A01-27-SW-17:0.5	36		1122										X
A01-27-B-23:1	37		1126										X
A01-27-SW-18:0.8	38		1136										X
A01-27-SW-37:1.8	39		1219										X
A01-27-SW-36:1.8	40		1223										X

SIGNATURE		PRINT NAME		COMPANY	DATE	TIME
Relinquished by: <u>Rebecca Beerra</u>		<u>Rebecca Beerra</u>		<u>EPI</u>	<u>08/21/19</u>	<u>1700</u>
Received by: <u>[Signature]</u>		<u>M. Paul G. G. G.</u>		<u>FLH</u>	<u>'</u>	<u>'</u>
Relinquished by:						
Received by:						

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

908438

SAMPLE CHAIN OF CUSTODY

ME 08-22-19

Page # 5 of 404

Report To Thermon Betsy King

Company EPI

Address 1180 NW Maple St SE, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email thermon@epi-wa.com

betsy@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

REMARKS

Rebecca Becerra

PO #

74001

INVOICE TO

Idaho

USA

TURNAROUND TIME

☐ Standard Turnaround

☒ RUSH 5 day 141

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-27-SW-35:1	41	08/21/19	1229	Soil	1								
DUP-115	42												
A01-27-SW-34:0.5	43		1244										
A01-27-B-26:1	44		1245										
A01-27-SW-33:0.5	45		1249										
A01-27-B-27:1	46		1250										
A01-27-SW-32:0.5	47		1251										
DUP-116	48												
A01-27-SW-29:1	49		1310										
A01-27-SW-28:1.5	50		1325										

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bryna, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by:

Received by:

Rebecca Becerra

Rebecca Becerra

EPI

08/21/19

1700

Relinquished by:

Michael Kendall

Michael Kendall

Fib

17

1

Received by:

908438

SAMPLE CHAIN OF CUSTODY

ME 08-22-19 16 Day

Report To Thom Merin, Patsy Winy

Company EPI

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425)395-0810 Email thom@epi-wa.com
net@epi-wa.com

SAMPLERS (signature) <u>Rebecca Becerra</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001</u>
REMARKS	INVOICE TO <u>Ichijo USA</u>

TURNAROUND TIME Page # <u>1</u> of <u>6</u>
<input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>5 day TAT</u> Rush charges authorized by: _____ SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-27-SW-30:1	51	08/21/19	1327	Soil	1								X
A01-27-SW-27:1.5	52		1331		1								X
A01-27-SW-25:1	53		1332		1								X
A01-27-SW-31:1.2	54		1335		1								X
A01-27-SW-24:0.8	55		1336		1								X
A01-27-SW-26:1	56		1337		1								X
A01-27-B-25:1.5	57		1340		1								X
A01-27-SW-22:0.5	58		1345		1								X
A01-27-SW-23:0.5	59		1346		1								X
A01-27-B-24:1	60		1347		1								X

SIGNATURE		PRINT NAME		COMPANY	DATE	TIME
Relinquished by:	<u>Rebecca Becerra</u>		<u>Rebecca Becerra</u>	<u>EPI</u>	<u>08/21/19</u>	<u>1700</u>
Received by:	<u>Michael E. Lu</u>		<u>Michael E. Lu</u>	<u>Heba</u>	<u>1</u>	<u>1</u>
Relinquished by:						
Received by:						

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 3, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 74001, F&BI 908467

Dear Mr Morin:

Included is the amended report from the testing of material submitted on August 22, 2019 from the 74001, F&BI 908467 project. Per your request, sample 908467-42 was changed to Dup-119.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Charles McFadden
EPI0830R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 30, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 74001, F&BI 908467

Dear Mr Morin:

Included are the results from the testing of material submitted on August 22, 2019 from the 74001, F&BI 908467 project. There are 60 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Charles McFadden
EPI0830R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 22, 2019 by Friedman & Bruya, Inc. from the Environmental Partners 74001, F&BI 908467 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
908467-01	AOI-11-B-6:4
908467-02	AOI-11-B-7:3.5
908467-03	AOI-28-B-2:1.5
908467-04	AOI-28-SW-5:0.5
908467-05	Dup-117
908467-06	AOI-28-B-3:1.5
908467-07	AOI-28-SW-8:0.5
908467-08	AOI-28-SW-6:0.5
908467-09	AOI-28-B-5:1.5
908467-10	AOI-28-SW-7:0.5
908467-11	AOI-28-B-4:1.5
908467-12	Dup-118
908467-13	AOI-30-SW-8:1
908467-14	AOI-30-SW-9:1
908467-15	AOI-30-B-16:1
908467-16	AOI-30-SW-10:1
908467-17	AOI-30-SW-12:1
908467-18	AOI-30-SW20:1
908467-19	AOI-30-SW-15:1
908467-20	AOI-30-SW-19:0.5
908467-21	AOI-30-SW-11:1
908467-22	AOI-30-SW-13:1
908467-23	AOI-30-SW-18:1
908467-24	AOI-30-B-17:4
908467-25	AOI-30-SW-21:1
908467-26	AOI-30-SW-17:1
908467-27	AOI-30-SW-14:1
908467-28	AOI-30-SW-16:1
908467-29	AOI-32-SW-8:1.5
908467-30	AOI-32-SW-10:1
908467-31	AOI-32-SW-9:1.5
908467-32	AOI-33-SW-15:0.5
908467-33	AOI-33-B-13:1
908467-34	AOI-33-SW-16:0.5
908467-35	AOI-33-B-14:1.5
908467-36	AOI-33-SW-17:1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
908467-37	AOI-33-SW-18:1
908467-38	AOI-33-SW-11:1
908467-39	AOI-33-SW-13:1
908467-40	AOI-33-SW-10:1.5
908467-41	AOI-33-SW-9:1
908467-42	Dup-119
908467-43	Dup-120
908467-44	AOI-33-SW-12:1
908467-45	AOI-33-SW-8:1
908467-46	AOI-33-SW-13:1
908467-47	AOI-33-SW-21:1
908467-48	AOI-33-SW-20:1
908467-49	AOI-33-SW-19:1

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-6:4	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-01 1/6
Date Analyzed:	08/28/19	Data File:	082851.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-7:3.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-02 1/6
Date Analyzed:	08/28/19	Data File:	082852.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-28-B-2:1.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-03 1/6
Date Analyzed:	08/29/19	Data File:	082853.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-28-SW-5:0.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-04 1/6
Date Analyzed:	08/29/19	Data File:	082854.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-117	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-05 1/6
Date Analyzed:	08/29/19	Data File:	082855.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-28-B-3:1.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-06 1/6
Date Analyzed:	08/29/19	Data File:	082856.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	70	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-28-SW-8:0.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-07 1/6
Date Analyzed:	08/29/19	Data File:	082857.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	56	50	150
DBC	62	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-28-SW-6:0.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/28/19	Lab ID:	908467-08 1/6
Date Analyzed:	08/29/19	Data File:	082910.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-28-B-5:1.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-09 1/6
Date Analyzed:	08/29/19	Data File:	082857.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-28-SW-7:0.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-10 1/6
Date Analyzed:	08/29/19	Data File:	082858.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-28-B-4:1.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-11 1/6
Date Analyzed:	08/29/19	Data File:	082859.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-118	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-12 1/6
Date Analyzed:	08/29/19	Data File:	082860.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-SW-8:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-13 1/6
Date Analyzed:	08/29/19	Data File:	082861.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-SW-9:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-14 1/6
Date Analyzed:	08/29/19	Data File:	082862.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.011

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-16:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-15 1/6
Date Analyzed:	08/29/19	Data File:	082863.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-SW-10:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-16 1/6
Date Analyzed:	08/29/19	Data File:	082864.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-SW-12:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-17 1/6
Date Analyzed:	08/29/19	Data File:	082865.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-SW20:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-18 1/6
Date Analyzed:	08/29/19	Data File:	082866.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-SW-15:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-19 1/6
Date Analyzed:	08/29/19	Data File:	082867.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-SW-19:0.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-20 1/6
Date Analyzed:	08/29/19	Data File:	082868.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-SW-11:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-21 1/6
Date Analyzed:	08/29/19	Data File:	082869.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-SW-13:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-22 1/6
Date Analyzed:	08/29/19	Data File:	082858.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	55	50	150
DBC	60	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-SW-18:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-23 1/6
Date Analyzed:	08/29/19	Data File:	082859.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-B-17:4	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-24 1/6
Date Analyzed:	08/29/19	Data File:	082860.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-SW-21:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-25 1/6
Date Analyzed:	08/29/19	Data File:	082861.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-SW-17:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-26 1/6
Date Analyzed:	08/29/19	Data File:	082862.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	51	50	150
DBC	62	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-SW-14:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-27 1/6
Date Analyzed:	08/29/19	Data File:	082863.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-30-SW-16:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/28/19	Lab ID:	908467-28 1/6
Date Analyzed:	08/29/19	Data File:	082914.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-SW-8:1.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-29 1/6
Date Analyzed:	08/29/19	Data File:	082864.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.013

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-SW-10:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-30 1/6
Date Analyzed:	08/29/19	Data File:	082865.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-32-SW-9:1.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-31 1/6
Date Analyzed:	08/29/19	Data File:	082866.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-15:0.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-32 1/6
Date Analyzed:	08/29/19	Data File:	082867.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-B-13:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	908467-33 1/6
Date Analyzed:	08/29/19	Data File:	082868.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-16:0.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/28/19	Lab ID:	908467-34 1/6
Date Analyzed:	08/29/19	Data File:	082915.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-B-14:1.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/28/19	Lab ID:	908467-35 1/6
Date Analyzed:	08/29/19	Data File:	082916.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-17:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/28/19	Lab ID:	908467-36 1/6
Date Analyzed:	08/29/19	Data File:	082917.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33:SW-18:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/28/19	Lab ID:	908467-37 1/6
Date Analyzed:	08/29/19	Data File:	082906.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-11:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/28/19	Lab ID:	908467-38 1/6
Date Analyzed:	08/29/19	Data File:	082907.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-13:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/28/19	Lab ID:	908467-39 1/6
Date Analyzed:	08/29/19	Data File:	082908.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-10:1.5	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/28/19	Lab ID:	908467-40 1/6
Date Analyzed:	08/29/19	Data File:	082909.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.13

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-9:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/28/19	Lab ID:	908467-41 1/6
Date Analyzed:	08/29/19	Data File:	082910.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.010

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-119	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/28/19	Lab ID:	908467-42 1/6
Date Analyzed:	08/29/19	Data File:	082911.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-120	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/28/19	Lab ID:	908467-43 1/6
Date Analyzed:	08/29/19	Data File:	082912.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-12:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/28/19	Lab ID:	908467-44 1/6
Date Analyzed:	08/29/19	Data File:	082913.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-8:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/28/19	Lab ID:	908467-45 1/6
Date Analyzed:	08/29/19	Data File:	082914.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-13:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/28/19	Lab ID:	908467-46 1/6
Date Analyzed:	08/29/19	Data File:	082915.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-21:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/28/19	Lab ID:	908467-47 1/6
Date Analyzed:	08/29/19	Data File:	082916.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-20:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/28/19	Lab ID:	908467-48 1/6
Date Analyzed:	08/29/19	Data File:	082917.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	71	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.033

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-19:1	Client:	Environmental Partners
Date Received:	08/22/19	Project:	74001, F&BI 908467
Date Extracted:	08/28/19	Lab ID:	908467-49 1/6
Date Analyzed:	08/29/19	Data File:	082918.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 908467
Date Extracted:	08/23/19	Lab ID:	09-2080 mb 1/6
Date Analyzed:	08/28/19	Data File:	082834.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 908467
Date Extracted:	08/28/19	Lab ID:	09-2125 mb 1/6
Date Analyzed:	08/29/19	Data File:	082909.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	90	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 908467
Date Extracted:	08/28/19	Lab ID:	09-2126 mb 1/6
Date Analyzed:	08/29/19	Data File:	082856.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	89	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 908467
Date Extracted:	08/28/19	Lab ID:	09-2127 mb 1/6
Date Analyzed:	08/29/19	Data File:	082908.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/30/19

Date Received: 08/22/19

Project: 74001, F&BI 908467

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908438-48 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	75	72	50-150	4

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	88	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/30/19

Date Received: 08/22/19

Project: 74001, F&BI 908467

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908467-08 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	85	82	45-130	4

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/30/19

Date Received: 08/22/19

Project: 74001, F&BI 908467

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908467-28 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	84	78	45-130	7

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	89	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/30/19

Date Received: 08/22/19

Project: 74001, F&BI 908467

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908499-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	3.6 ve	176 b	487 b	45-130	94 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	84	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

908467

SAMPLE CHAIN OF CUSTODY

ME 08-22-19

Page # 104 of 5

Report To Thom MainCompany EP1Address 1180 Alw Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 325-0010 Email thom@epi-wa.com

SAMPLERS (signature)

PROJECT NAME

Brookdale

REMARKS

INVOICE TO

14001ichigUSA

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 5 day TAT

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-11-B-6:4	01	08/22/19	0833	Soil	1								
A01-11-B-7:3.5	02		0837										
A01-28-B-2:1.5	03		0907										
A01-28-SW-5:0.5	04		0911										
DUP-117	05												
A01-28-B-3:1.5	06		0919										
A01-28-SW-8:0.5	07		0920										
A01-28-SW-6:0.5	08		0923										
A01-28-B-5:1.5	09		0924										
A01-28-SW-7:0.5	10		0926										

Samples received at 5 °C

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by:

Rebecca BecerraRebecca BecerraEP108/22/19 1700

Received by:

MichelleMichelleF14inc1

Relinquished by:

MichelleMichelleF14inc1

Received by:

MichelleMichelleF14inc1

908467

SAMPLE CHAIN OF CUSTODY

ME 08-22-19

204

Report To Thom MerinCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0000 Email thom@epi-wa.comPage # 2 of 5

TURNAROUND TIME

Standard Turnaround

RUSH 5 day MT

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

SAMPLERS (signature)

PROJECT NAME

Brookdale

REMARKS

INVOICE TO
1chriso
USA

PO #

74001

ANALYSES REQUESTED

TPH-HCID

TPH-Diesel

TPH-Gasoline

BTEX by 8021B

VOCs by 8260C

SVOCs by 8270D

PAHs 8270D SIM

Diddin
(method 808)

Notes

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-28-B-4:1.5	11	08/22/19	0927	Soil	1								
DUP-118	12												
A01-30-SW-8:1	13		1011										
A01-30-SW-9:1	14		1019										
A01-30-B-16:1	15		1023										
A01-30-SW-10:1	16		1027										
A01-30-SW-12:1	17		1043										
A01-30-SW-20:1	18		1046										
A01-30-SW-15:1	19		1047										
A01-30-SW-19:0.5	20		1050										

Samples received at 5:00

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by:

Received by:

Relinquished by:

Received by:

Rebecca BruyaRebecca BruyaEP108/22/191700Michael ErdickF18inc

908467

SAMPLE CHAIN OF CUSTODY

ME 08-22-19

Page # 3 of 5

Report To Thom MaximCompany EP1Address 180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 945-0010 Email thommax@ep1-wa.com

SAMPLERS (signature) <u>Robert B...</u>	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001</u>
REMARKS <u>1 chld USA</u>	INVOICE TO <u>USA</u>

TURNAROUND TIME <u>Standard Turnaround</u> <u>RUSH 5 day 741</u> Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Standard after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other
---	---

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes	
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM		
A01-30-SW-11:1	21	08/22/19	1035	Soil	1								X	
A01-30-SW-13:1	22		1051										X	
A01-30-SW-18:1	23		1054										X	
A01-30-B-17:4	24		1055										X	
A01-30-SW-21:1	25		1056										X	
A01-30-SW-17:1	26		1058										X	
A01-30-SW-14:1	27		1059										X	
A01-30-SW-16:1	28		1101										X	
A01-32-SW-8:05	29		1211										X	
A01-32-SW-10:1	30		1215										X	
Samples received at 5 °C														

Samples received at 5:00

SIGNATURE

Relinquished by:

Received by:

Relinquished by:

Received by:

PRINT NAME

Relinquished by:

Received by:

Relinquished by:

Received by:

COMPANY

Relinquished by:

Received by:

Relinquished by:

Received by:

DATE

Relinquished by:

Received by:

Relinquished by:

Received by:

TIME

Relinquished by:

Received by:

Relinquished by:

Received by:

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

908467

SAMPLE CHAIN OF CUSTODY

HE 08-22-19

Page # 404 of 5

Report To Thom MorinCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0010 Email thom@epi-wa.comSAMPLERS (signature) Rebecca B

PROJECT NAME

Brookdale

PO #

74601

REMARKS

Invoice 14150 USATURNAROUND TIME
☐ Standard Turnaround
☒ RUSH 5 day TAT
Rush charges authorized by:SAMPLE DISPOSAL
☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-32-SW-9:1.5	21	08/22/19	1216	Soil	1								
A01-33-SW-15:0.5	32		1247										
A01-33-B-13:1	33		1253										
A01-33-SW-16:0.5	34		1257										
A01-33-B-14:1.5	35		1301										
A01-33-SW-17:1	36		1305										
A01-33-SW-18:1	37		1309										
A01-33-SW-11:1	38		1316										
A01-33-SW-13:1	39		1319										
A01-33-SW-10:1.5	40		1320										

Samples received at 5 °C

SIGNATURE

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

PRINT NAME

Rebecca Becerra

Michael E. Hall

COMPANY

EP1

F18

DATE

08/22/19

1700

TIME

1

Received by:

908467

SAMPLE CHAIN OF CUSTODY

ME 08-22-19 5 304 5

Report To: Therm MTRINCompany: EP1Address: 1180 NW Maple St, Ste 310City, State, ZIP: Issaquah, WA 98027Phone: (425)395-0010 Email: therm@epi-wa.comSAMPLERS (signature) R. B.

PROJECT NAME

PO #

REMARKS

INVOICE TO

TURNAROUND TIME
of 5

☐ Standard Turnaround
☒ RUSH 5 day 747

Rush charges authorized by:

SAMPLE DISPOSAL
☐ Dispose after 30 days
☒ Archive Samples
☐ Other

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-33-SW-9:1	41	10/22/19	1322	Soil	1								
DWP-117	42												
DWP-120	43												
A01-33-SW-12:1	44		1323										
A01-33-SW-8:1	45		1324										
A01-33-SW-13:1	46		1329										
A01-33-SW-21:1	47		1336										
A01-33-SW-20:1	48		1332										
A01-33-SW-19:1	49		1333										

Samples received at 5:00

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by:	<u>[Signature]</u>	<u>Pedro Rivera</u>	<u>EP1</u>	<u>10/22/19</u>	<u>1300</u>
Received by:	<u>[Signature]</u>	<u>Michael Eckel</u>	<u>EP1</u>	<u>1</u>	<u>1</u>
Relinquished by:					
Received by:					

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 9, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 908499

Dear Mr Morin:

Included are the results from the testing of material submitted on August 23, 2019 from the Brookdale 74001, F&BI 908499 project. There are 40 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0909R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 23, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 908499 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
908499 -01	AOI-34-SW-5:0.5
908499 -02	AOI-34-SW-6:0.5
908499 -03	DUP-121
908499 -04	AOI-34-B-3:0.5
908499 -05	AOI-34-SW-7:0.5
908499 -06	AOI-34-SW-9:0.5
908499 -07	AOI-34-SW-12:0.5
908499 -08	AOI-34-B-4:0.5
908499 -09	AOI-34-B-5:0.5
908499 -10	AOI-34-SW-11:0.5
908499 -11	AOI-34-SW-8:0.5
908499 -12	AOI-34-SW-10:0.5
908499 -13	AOI-35-SW-7:1
908499 -14	AOI-35-B-11:1
908499 -15	AOI-35-SW-8:1
908499 -16	AOI-35-SW-9:1
908499 -17	AOI-35-B-12:1
908499 -18	AOI-35-SW-11:1.5
908499 -19	AOI-35-SW-10:1
908499 -20	AOI-35-SW-15:1
908499 -21	AOI-35-SW-14:1
908499 -22	AOI-35-SW-13:1
908499 -23	AOI-35-SW-16:1
908499 -24	AOI-35-SW-12:1
908499 -25	DUP-122
908499 -26	AOI-36-SW-6:0.5
908499 -27	DUP-123
908499 -28	AOI-36-SW-7:0.5
908499 -29	AOI-36-SW-9:0.5
908499 -30	AOI-36-B-7:0.5
908499 -31	AOI-36-B-8:0.2
908499 -32	AOI-36-SW-10:0.5
908499 -33	AOI-36-SW-11:0.5
908499 -34	AOI-36-SW-8:0.5

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-SW-5:0.5	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-01 1/120
Date Analyzed:	09/03/19	Data File:	090314.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66 d	50	150
DBC	72 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	3.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-SW-6:0.5	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-02 1/6
Date Analyzed:	08/29/19	Data File:	082930.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.013

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-121	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-03 1/6
Date Analyzed:	08/29/19	Data File:	082931.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-B-3:0.5	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-04 1/6
Date Analyzed:	08/29/19	Data File:	082932.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-SW-7:0.5	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-05 1/6
Date Analyzed:	08/29/19	Data File:	082933.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-SW-9:0.5	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-06 1/6
Date Analyzed:	08/29/19	Data File:	082934.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-SW-12:0.5	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-07 1/6
Date Analyzed:	08/29/19	Data File:	082935.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-B-4:0.5	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-08 1/6
Date Analyzed:	08/29/19	Data File:	082936.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-B-5:0.5	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-09 1/6
Date Analyzed:	08/29/19	Data File:	082937.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	55	50	150
DBC	70	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-SW-11:0.5	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-10 1/6
Date Analyzed:	08/29/19	Data File:	082938.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	77	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-SW-8:0.5	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-11 1/6
Date Analyzed:	08/29/19	Data File:	082939.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-SW-10:0.5	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-12 1/6
Date Analyzed:	08/29/19	Data File:	082940.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.061

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-7:1	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-13 1/6
Date Analyzed:	08/29/19	Data File:	082941.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	76	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-11:1	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-14 1/6
Date Analyzed:	08/29/19	Data File:	082942.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-8:1	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-15 1/6
Date Analyzed:	08/29/19	Data File:	082943.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.039

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-9:1	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-16 1/6
Date Analyzed:	08/29/19	Data File:	082944.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	73	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-12:1	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-17 1/6
Date Analyzed:	08/29/19	Data File:	082945.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-11:1.5	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-18 1/6
Date Analyzed:	08/29/19	Data File:	082946.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.013

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-10:1	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-19 1/6
Date Analyzed:	08/29/19	Data File:	082938.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL/VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-15:1	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-20 1/6
Date Analyzed:	08/29/19	Data File:	082947.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-14:1	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-21 1/6
Date Analyzed:	08/29/19	Data File:	082948.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-13:1	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-22 1/6
Date Analyzed:	08/29/19	Data File:	082950.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	83 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-16:1	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-23 1/6
Date Analyzed:	08/29/19	Data File:	082951.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	77 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-12:1	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-24 1/6
Date Analyzed:	08/29/19	Data File:	082952.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	81 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-122	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-25 1/6
Date Analyzed:	08/29/19	Data File:	082953.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	74 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-SW-6:0.5	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-26 1/6
Date Analyzed:	08/30/19	Data File:	082954.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	76 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-123	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-27 1/6
Date Analyzed:	08/30/19	Data File:	082955.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	81 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-SW-7:0.5	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-28 1/6
Date Analyzed:	08/30/19	Data File:	082956.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	82 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.30

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-SW-9:0.5	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-29 1/6
Date Analyzed:	08/30/19	Data File:	082957.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	76 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.024

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-B-7:0.5	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-30 1/6
Date Analyzed:	08/30/19	Data File:	082958.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	77 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-B-8:0.2	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-31 1/6
Date Analyzed:	08/30/19	Data File:	082959.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	80 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-SW-10:0.5	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-32 1/6
Date Analyzed:	08/30/19	Data File:	082960.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	76 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-SW-11:0.5	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-33 1/6
Date Analyzed:	08/30/19	Data File:	082961.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	76 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-SW-8:0.5	Client:	Environmental Partners
Date Received:	08/23/19	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	908499-34 1/6
Date Analyzed:	08/30/19	Data File:	082962.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	69 ca	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.026

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	09-2127 mb 1/6
Date Analyzed:	08/29/19	Data File:	082908.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 908499
Date Extracted:	08/28/19	Lab ID:	09-2128 mb 1/6
Date Analyzed:	08/29/19	Data File:	082937.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL/VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/09/19

Date Received: 08/23/19

Project: Brookdale 74001, F&BI 908499

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908499-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	3.6 ve	176 b	487 b	45-130	94 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	84	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/09/19

Date Received: 08/23/19

Project: Brookdale 74001, F&BI 908499

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 908499-19 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.090	67 b	55 b	45-130	20 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

908499

SAMPLE CHAIN OF CUSTODY

ME 08-23-19

46 of 1 Doc

Report To Thom MarxCompany EPIAddress 1180 NW Maple St Ste 310City, State, ZIP Issaquah, WA 98027Phone (425)395-0810 Email thommarx@epi-wa.com

SAMPLERS (signature) <u>[Signature]</u>		Page # <u>46</u> of <u>1</u>
PROJECT NAME	PO #	TURNAROUND TIME
<u>Brookdale</u>	<u>74001</u>	<u>5 days 11h</u>
REMARKS	INVOICE TO	SAMPLE DISPOSAL
	<u>16mjo</u>	<input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH Rush charges authorized by: <u>[Signature]</u>
	<u>034</u>	<input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM				
A01-34-SW-5:0.5	01	8/19/19	0635	Soil	1								X			
A01-34-SW-6:0.5	02		0639										X			
DUP-121	03												X			
A01-34-B-3:0.5	04		0651										X			
A01-34-SW-7:0.5	05		0655										X			
A01-34-SW-9:0.5	06		1001										X			
A01-34-SW-12:0.5	07		1004										X			
A01-34-B-4:0.5	08		1005										X			
A01-34-B-5:0.5	09		1006										X			
A01-34-SW-11:0.5	10		1008										X			

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: <u>[Signature]</u>	Relinquished by: <u>Rebecca Baccara</u>	Received by: <u>[Signature]</u>	Received by: <u>Michael Ell</u>
Relinquished by:		Received by:	
		Samples received at <u>2</u> °C	

908499

SAMPLE CHAIN OF CUSTODY

ME 08-23-19

Doc

Report To Thom Merin

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 855-0016 Email thom@epi-wa.com

SAMPLES (signature) <u>[Signature]</u>		TURNAROUND TIME	
PROJECT NAME <u>Brookdale</u>	PO # <u>74001</u>	INVOICE TO <u>16410 USA</u>	
REMARKS	<input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>5 day TAT</u> Rush charges authorized by: _____ SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____		

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	(1819) (method 8081)			
A01-31-SW-8-0.5	11	08/23/19	1009	Soil	1								X			
A01-34-SW-10-0.5	12		1010										X			
A01-35-SW-7:1	13		1055										X			
A01-35-B-11:1	14		1059										X			
A01-35-SW-8:1	15		1103										X			
A01-35-SW-9:1	16		1107										X			
A01-35-B-12:1	17		1111										X			
A01-35-SW-11:1.5	18		1115										X			
A01-35-SW-10:1	19		1119										X			
A01-35-SW-15:1	20		1120										X			

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>[Signature]</u>		Rebecca Brerica		EP1		08/23/19		1705	
Received by: <u>[Signature]</u>		Michael Calk		FIR					
Relinquished by:									
Received by:									

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

SAMPLE CHAIN OF CUSTODY

Me 08-23-19 3 of 3 Day

908499

Report To Thom Moxlin
 Company EPI
 Address 1180 NW Maple St, Ste 210
 City, State, ZIP Issaquah, WA 98027
 Phone 425-855-0610 Email thommo@epi-wa.com

SAMPLERS (signature) <u>[Signature]</u>		PO # <u>74001</u>
PROJECT NAME <u>Brookdale</u>		INVOICE TO <u>1chigo USA</u>
REMARKS		SAMPLE DISPOSAL <input type="checkbox"/> Standard Turnaround <input checked="" type="checkbox"/> RUSH <u>5 day</u> <u>TH</u> Rush charges authorized by: <u>[Signature]</u>

						ANALYSES REQUESTED										Notes
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	(Field in Method 8081)			
A01-35-SW-14.1	21	08/23/19	1122	Soil	1								X			
A01-35-SW-13.1	22		1124										X			
A01-35-SW-16.1	23		1126										X			
A01-35-SW-12.1	24		1125										X			
DUP-122	25		—										X			
A01-36-SW-6:0.5	24		1225										X			
DUP-123	27		—										X			
A01-36-SW-7:0.5	28		1229										X			
A01-36-SW-9:0.5	29		1236										X			
A01-36-B-7:0.5	30		1239										X			

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>[Signature]</u>		Rebecca Pearce		EPI		08/23/19		1700	
Received by: <u>[Signature]</u>		Michael Enell		FIR					
Relinquished by:									
Received by:									

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

908499

SAMPLE CHAIN OF CUSTODY

ME 08-23-19

4

Dey

Report To Thom MarinCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Brockdale, WA 98027Phone (425) 355-0010 Email thommarin@ep1.comSAMPLERS (signature) [Signature]

PROJECT NAME

Brockdale

PO #

74001

REMARKS

INVOICE TO
Wing 10 USA

TURNAROUND TIME

☐ Standard Turnaround
☒ RUSH 5-day PMT
 Rush charges authorized by: [Signature]

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	<u>Dieldrin (Method 8231)</u>			
A01-30-B-8:0.2	31	08/23/19	1240	Soil	1								X			
A01-30-SW-10:0.5	32		1244										X			
A01-30-SW-11:0.5	33		1246										X			
A01-30-SW-8:0.5	34		1244										X			
													X			
													X			
													X			
													X			
													X			
													X			
													X			

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: [Signature]Reverted by: [Signature]

Rebecca Baccara

Michael E. Cady

EP1

FVH

08/23/19 1700

1

Received by:

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 9, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 74001, F&BI 909012

Dear Mr Morin:

Included are the results from the testing of material submitted on September 3, 2019 from the 74001, F&BI 909012 project. There are 7 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Charles McFadden
EPI0909R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 3, 2019 by Friedman & Bruya, Inc. from the Environmental Partners 74001, F&BI 909012 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
909012-01	AOI-19-SW-13:2
909012-02	AOI-25-SW-16:0.8
909012-03	AOI-22-SW-14:1

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-SW-13:2	Client:	Environmental Partners
Date Received:	09/03/19	Project:	74001, F&BI 909012
Date Extracted:	09/04/19	Lab ID:	909012-01 1/6
Date Analyzed:	09/04/19	Data File:	090428.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-16:0.8	Client:	Environmental Partners
Date Received:	09/03/19	Project:	74001, F&BI 909012
Date Extracted:	09/04/19	Lab ID:	909012-02 1/6
Date Analyzed:	09/05/19	Data File:	090506.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.12

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-SW-14:1	Client:	Environmental Partners
Date Received:	09/03/19	Project:	74001, F&BI 909012
Date Extracted:	09/04/19	Lab ID:	909012-03 1/6
Date Analyzed:	09/05/19	Data File:	090507.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 909012
Date Extracted:	09/05/19	Lab ID:	09-2182 mb2 1/6
Date Analyzed:	09/05/19	Data File:	090505.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	100	50	150
DBC	113	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/09/19

Date Received: 09/03/19

Project: 74001, F&BI 909012

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	ug/L (ppb)	0.5	80	75	54-115	6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

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Company ETI

Address 1180 NW Maple St. 310

City, State, ZIP Issaquah, WA 98027

Phone (4125) 345-0016 Email charlesw@epi-wa

TURNAROUND TIME

☐ Standard Turnaround
RUSH 5-day TAAT

Rush charges authorized by _____

SAMPLE DISPOSAL

☐ Dispose after 30 days
☐ Archive Samples
☐ Other _____

ANALYSES REQUESTED

[illegible]

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

October 17, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 909522

Dear Mr Morin:

Included is the amended report from the testing of material submitted on September 30, 2019 from the Brookdale 74001, F&BI 909522 project. Per your request, sample ID AOI-26-SW-28:1 has been corrected to AOI-26-SW-28:0.5.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Charles McFadden
EPI1009R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

October 9, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 909522

Dear Mr Morin:

Included are the results from the testing of material submitted on September 30, 2019 from the Brookdale 74001, F&BI 909522 project. There are 57 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Charles McFadden
EPI1009R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 30, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 909522 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
909522 -01	AOI-36-SW-12:0.5
909522 -02	AOI-36-SW-13:0.5
909522 -03	AOI-36-SW-14:0.5
909522 -04	AOI-36-B-9:1
909522 -05	AOI-35-SW-17:1
909522 -06	AOI-35-SW-18:1
909522 -07	AOI-35-SW-19:1
909522 -08	AOI-35-B-13:2
909522 -09	AOI-35-B-14:2
909522 -10	DUP-124
909522 -11	AOI-34-SW-13:0.8
909522 -12	AOI-34-SW-14:0.5
909522 -13	AOI-34-SW-15:0.5
909522 -14	AOI-34-B-6:1
909522 -15	AOI-33-SW-22:1.5
909522 -16	AOI-33-SW-23:1.5
909522 -17	AOI-33-SW-24:1.5
909522 -18	AOI-33-B-15:2
909522 -19	AOI-27-SW-38:2
909522 -20	AOI-27-B-28:3
909522 -21	DUP-125
909522 -22	AOI-27-SW-39:1.5
909522 -23	AOI-27-SW-40:1.5
909522 -24	AOI-27-SW-41:1.5
909522 -25	AOI-27-B-29:3
909522 -26	AOI-27-SW-42:0.5
909522 -27	AOI-27-SW-43:0.5
909522 -28	AOI-27-SW-44:1
909522 -29	AOI-27-B-30:1.5
909522 -30	AOI-27-B-31:2
909522 -31	AOI-27-B-32:2
909522 -32	AOI-27-SW-45:0.8
909522 -33	AOI-27-SW-46:0.5
909522 -34	AOI-27-B-33:2
909522 -35	AOI-27-B-34:2
909522 -36	DUP-126

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
909522 -37	AOI-26-SW-27:0.5
909522 -38	AOI-26-B-19:2
909522 -39	AOI-26-SW-28:0.5
909522 -40	AOI-26-SW-29:1
909522 -41	AOI-26-SW-30:1
909522 -42	AOI-26-SW-31:1
909522 -43	AOI-26-B-20:2
909522 -44	DUP-127
909522 -45	AOI-25-SW-26:0.8
909522 -46	AOI-25-B-18:2
909522 -47	AOI-25-SW-27:0.8
909522 -48	AOI-25-SW-28:0.8

The dieldrin concentration in sample AOI-27-SW-42:0.5 exceeded the calibration range of the instrument. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-SW-12:0.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-01 1/6
Date Analyzed:	10/02/19	Data File:	100207.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.092

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-SW-13:0.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-02 1/6
Date Analyzed:	10/02/19	Data File:	100210.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.028

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-SW-14:0.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-03 1/6
Date Analyzed:	10/02/19	Data File:	100211.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.029

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-B-9:1	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-04 1/6
Date Analyzed:	10/02/19	Data File:	100212.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-17:1	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-05 1/6
Date Analyzed:	10/02/19	Data File:	100213.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.052

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-18:1	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-06 1/6
Date Analyzed:	10/02/19	Data File:	100214.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-19:1	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-07 1/6
Date Analyzed:	10/02/19	Data File:	100215.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.19

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-13:2	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-08 1/6
Date Analyzed:	10/02/19	Data File:	100216.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.18

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-14:2	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-09 1/6
Date Analyzed:	10/02/19	Data File:	100217.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-124	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-10 1/6
Date Analyzed:	10/02/19	Data File:	100218.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.076

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-SW-13:0.8	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-11 1/6
Date Analyzed:	10/02/19	Data File:	100219.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.14

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-SW-14:0.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-12 1/6
Date Analyzed:	10/02/19	Data File:	100220.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.14

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-SW-15:0.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-13 1/6
Date Analyzed:	10/02/19	Data File:	100221.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.15

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-B-6:1	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-14 1/6
Date Analyzed:	10/02/19	Data File:	100222.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-22:1.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-15 1/6
Date Analyzed:	10/02/19	Data File:	100228.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-23:1.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-16 1/6
Date Analyzed:	10/02/19	Data File:	100229.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-24:1.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-17 1/6
Date Analyzed:	10/02/19	Data File:	100230.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-B-15:2	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-18 1/6
Date Analyzed:	10/02/19	Data File:	100231.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-38:2	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-19 1/6
Date Analyzed:	10/02/19	Data File:	100232.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	52	50	150
DBC	64	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-28:3	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-20 1/6
Date Analyzed:	10/02/19	Data File:	100233.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-125	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-21 1/6
Date Analyzed:	10/02/19	Data File:	100238.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-39:1.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-22 1/6
Date Analyzed:	10/02/19	Data File:	100239.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.030

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-40:1.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-23 1/6
Date Analyzed:	10/02/19	Data File:	100240.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-41:1.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-24 1/6
Date Analyzed:	10/02/19	Data File:	100241.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-29:3	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-25 1/6
Date Analyzed:	10/02/19	Data File:	100242.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	52	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-42:0.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-26 1/6
Date Analyzed:	10/02/19	Data File:	100243.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.77 ve

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-43:0.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-27 1/6
Date Analyzed:	10/02/19	Data File:	100244.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.19

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-44:1	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-28 1/60
Date Analyzed:	10/07/19	Data File:	100727.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72 d	50	150
DBC	75 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.75

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-30:1.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-29 1/6
Date Analyzed:	10/02/19	Data File:	100247.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.55

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-31:2	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-30 1/6
Date Analyzed:	10/02/19	Data File:	100248.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.32

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-32:2	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-31 1/6
Date Analyzed:	10/02/19	Data File:	100249.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.014

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-45:0.8	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-32 1/6
Date Analyzed:	10/03/19	Data File:	100250.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-46:0.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-33 1/6
Date Analyzed:	10/03/19	Data File:	100251.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.058

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-33:2	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-34 1/6
Date Analyzed:	10/03/19	Data File:	100252.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-34:2	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-35 1/6
Date Analyzed:	10/03/19	Data File:	100253.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.072

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-126	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-36 1/6
Date Analyzed:	10/03/19	Data File:	100254.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-27:0.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-37 1/6
Date Analyzed:	10/03/19	Data File:	100255.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.076

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-19:2	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-38 1/6
Date Analyzed:	10/03/19	Data File:	100256.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-28:0.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-39 1/60
Date Analyzed:	10/07/19	Data File:	100728.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79 d	50	150
DBC	83 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.78

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-29:1	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-40 1/6
Date Analyzed:	10/03/19	Data File:	100258.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-30:1	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-41 1/6
Date Analyzed:	10/03/19	Data File:	100310.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-31:1	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-42 1/6
Date Analyzed:	10/03/19	Data File:	100320.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.018

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-20:2	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-43 1/6
Date Analyzed:	10/03/19	Data File:	100311.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-127	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-44 1/6
Date Analyzed:	10/03/19	Data File:	100312.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-26:0.8	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-45 1/6
Date Analyzed:	10/03/19	Data File:	100313.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.046

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-18:2	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-46 1/6
Date Analyzed:	10/03/19	Data File:	100314.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-27:0.8	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-47 1/6
Date Analyzed:	10/03/19	Data File:	100315.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-28:0.8	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-48 1/6
Date Analyzed:	10/03/19	Data File:	100316.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	09-2408 mb 1/6
Date Analyzed:	10/02/19	Data File:	100205.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	93	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	09-2409 mb 1/6
Date Analyzed:	10/02/19	Data File:	100234.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	09-2410 mb 1/6
Date Analyzed:	10/03/19	Data File:	100307.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/09/19

Date Received: 09/30/19

Project: Brookdale 74001, F&BI 909522

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 909522-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.084	68 b	49 b	45-130	32 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	98	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/09/19

Date Received: 09/30/19

Project: Brookdale 74001, F&BI 909522

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 909522-21 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	80	73	45-130	9

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	88	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/09/19

Date Received: 09/30/19

Project: Brookdale 74001, F&BI 909522

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 909522-41 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	84	85	45-130	1

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

909522

SAMPLE CHAIN OF CUSTODY

ME 09/30/14

Bos 5

Report to Mon Mon: Charles McFaddenCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 375-0000 Email charlesmcfadden@ep1.comCharles McFadden

SAMPLERS (signature)

PROJECT NAME

PO #

REMARKS

INVOICE TO

Idiyo USA

TURNAROUND TIME

Standard Turnaround

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Archive Samples

Other

ANALYSES REQUESTED

TPH-HCID
 TPH-Diesel
 TPH-Gasoline
 BTEX by 8021B
 VOCs by 8260C
 SVOCs by 8270D
 PAHs 8270D SIM
 Dieldrin (method 8081)

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Dieldrin (method 8081)	Notes
A01-30-SW-12:0.5	01	09/30/14	0815	Soil	1								X	
A01-30-SW-13:0.5	02		0816		1									
A01-30-SW-14:0.5	03		0817		1									
A01-30-B-9:1	04		0820		1									
A01-35-SW-17:1	05		0845		1									
A01-35-SW-18:1	06		0846		1									
A01-35-SW-19:1	07		0848		1									
A01-35-B-13:2	08		0849		1									
A01-35-B-14:2	09		0850		1									
DUP-124	10				1									

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8382

Relinquished by:

[Signature]Roberta PereiraEP109/30/141700

Received by:

[Signature]Ryan PhamICBI09/30/141700

Relinquished by:

[Signature]Ryan PhamICBI09/30/141700

Received by:

[Signature]Ryan PhamICBI09/30/141700

909522

SAMPLE CHAIN OF CUSTODY ME 09/30/19

BAS

Page # 2 of 5

Report To Thom Marx, Charles McFaddenCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425)345-0900 email: thom.marx@ep1-wa.comCharles McFadden

SAMPLERS (signature)

PROJECT NAME Brookdale

PO #

REMARKS

INVOICE TO

Idiije USA

TURNAROUND TIME

☒ Standard Turnaround☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☒ Archive Samples☐ Other

ANALYSES REQUESTED

TPH-HCID
TPH-Diesel
TPH-Gasoline
BTEX by 8021B
VOCs by 8260C
SVOCs by 8270D
PAHs 8270D SIMDiethylin

Notes

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-34-SW-13:08	11	09/30/19	0910	Soil	1								X
A01-34-SW-14:05	12		0912										
A01-34-SW-15:05	13		0913										
A01-34-B-6:1	14		0915										
A01-33-SW-22:15	15		0926										
A01-33-SW-23:15	16		0927										
A01-33-SW-24:15	17		0929										
A01-33-B-15:2	18		0930										
A01-27-SW-38:2	19		0952										
A01-27-B-28:3	20		0955										

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

[Signature]Rebecca BecerraEP109/30/191720

Received by:

[Signature]Thom MarxFEBI9/30/191720

Relinquished by:

[Signature]Thom MarxFEBI9/30/191720

Received by:

[Signature]Thom MarxFEBI9/30/191720

Friedman & Bryna, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

205

Page # 2 of 2
TURNAROUND TIME

☒ Standard Turnaround
☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

SAMPLE DISPOSAL

☐ Dispose after 30
☒ Archive Samples
☐ Other _____

ANALYSES REQUESTED

[illegible]

Ph. (206) 285-8282

TIME

1

20/12

50

909522

SAMPLE CHAIN OF CUSTODY

ME 09/30/19

Box 4

Report To Thom Mason, Charles McEldon

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 385-0010 Email thom@ep1-wa.com

thom@ep1-wa.com

SAMPLERS (signature)		PO #
PROJECT NAME		74001
REMARKS	INVOICE TO	
<u>Brookdale</u>	<u>10110</u>	
	<u>USA</u>	

TURNAROUND TIME	Page # <u>4</u> of <u>5</u>
<input checked="" type="checkbox"/> Standard Turnaround	
<input type="checkbox"/> RUSH	
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	
<input checked="" type="checkbox"/> Archive Samples	
<input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-27-B-32-2	31	09/30/19	1040	Soil	1							X	
A01-27-SW-45:0.8	32		1047										
A01-27-SW-46:0.5	33		1048										
A01-27-B-33:2	34		1050										
A01-27-B-34:2	35		1052										
DMP-126	36		—										
A01-26-SW-27:0.5	37		1128										
A01-26-B-19:2	38		1129										
A01-26-SW-28:10.5	39		1130										7 D upltd per CM 10/16/19
A01-26-SW-29:1	40		1132										

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Rebecca Bucerra</u>	<u>EP1</u>	<u>09/30/19</u>	
Received by: <u>[Signature]</u>	<u>Ryan Shan</u>	<u>FBI</u>	<u>9/30/19</u>	<u>1700</u>
Relinquished by:				
Received by:		Samples received at	<u>5</u>	<u>00</u>

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

October 9, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 909522

Dear Mr Morin:

Included are the results from the testing of material submitted on September 30, 2019 from the Brookdale 74001, F&BI 909522 project. There are 57 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Charles McFadden
EPI1009R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 30, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 909522 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
909522 -01	AOI-36-SW-12:0.5
909522 -02	AOI-36-SW-13:0.5
909522 -03	AOI-36-SW-14:0.5
909522 -04	AOI-36-B-9:1
909522 -05	AOI-35-SW-17:1
909522 -06	AOI-35-SW-18:1
909522 -07	AOI-35-SW-19:1
909522 -08	AOI-35-B-13:2
909522 -09	AOI-35-B-14:2
909522 -10	DUP-124
909522 -11	AOI-34-SW-13:0.8
909522 -12	AOI-34-SW-14:0.5
909522 -13	AOI-34-SW-15:0.5
909522 -14	AOI-34-B-6:1
909522 -15	AOI-33-SW-22:1.5
909522 -16	AOI-33-SW-23:1.5
909522 -17	AOI-33-SW-24:1.5
909522 -18	AOI-33-B-15:2
909522 -19	AOI-27-SW-38:2
909522 -20	AOI-27-B-28:3
909522 -21	DUP-125
909522 -22	AOI-27-SW-39:1.5
909522 -23	AOI-27-SW-40:1.5
909522 -24	AOI-27-SW-41:1.5
909522 -25	AOI-27-B-29:3
909522 -26	AOI-27-SW-42:0.5
909522 -27	AOI-27-SW-43:0.5
909522 -28	AOI-27-SW-44:1
909522 -29	AOI-27-B-30:1.5
909522 -30	AOI-27-B-31:2
909522 -31	AOI-27-B-32:2
909522 -32	AOI-27-SW-45:0.8
909522 -33	AOI-27-SW-46:0.5
909522 -34	AOI-27-B-33:2
909522 -35	AOI-27-B-34:2
909522 -36	DUP-126

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
909522 -37	AOI-26-SW-27:0.5
909522 -38	AOI-26-B-19:2
909522 -39	AOI-26-SW-28:1
909522 -40	AOI-26-SW-29:1
909522 -41	AOI-26-SW-30:1
909522 -42	AOI-26-SW-31:1
909522 -43	AOI-26-B-20:2
909522 -44	DUP-127
909522 -45	AOI-25-SW-26:0.8
909522 -46	AOI-25-B-18:2
909522 -47	AOI-25-SW-27:0.8
909522 -48	AOI-25-SW-28:0.8

The dieldrin concentration in sample AOI-27-SW-42:0.5 exceeded the calibration range of the instrument. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-SW-12:0.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-01 1/6
Date Analyzed:	10/02/19	Data File:	100207.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.092

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-SW-13:0.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-02 1/6
Date Analyzed:	10/02/19	Data File:	100210.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.028

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-SW-14:0.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-03 1/6
Date Analyzed:	10/02/19	Data File:	100211.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.029

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-B-9:1	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-04 1/6
Date Analyzed:	10/02/19	Data File:	100212.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-17:1	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-05 1/6
Date Analyzed:	10/02/19	Data File:	100213.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.052

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-18:1	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-06 1/6
Date Analyzed:	10/02/19	Data File:	100214.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-19:1	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-07 1/6
Date Analyzed:	10/02/19	Data File:	100215.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.19

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-13:2	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-08 1/6
Date Analyzed:	10/02/19	Data File:	100216.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.18

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-14:2	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-09 1/6
Date Analyzed:	10/02/19	Data File:	100217.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-124	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-10 1/6
Date Analyzed:	10/02/19	Data File:	100218.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.076

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-SW-13:0.8	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-11 1/6
Date Analyzed:	10/02/19	Data File:	100219.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.14

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-SW-14:0.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-12 1/6
Date Analyzed:	10/02/19	Data File:	100220.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.14

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-SW-15:0.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-13 1/6
Date Analyzed:	10/02/19	Data File:	100221.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.15

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-B-6:1	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-14 1/6
Date Analyzed:	10/02/19	Data File:	100222.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-22:1.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-15 1/6
Date Analyzed:	10/02/19	Data File:	100228.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-23:1.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-16 1/6
Date Analyzed:	10/02/19	Data File:	100229.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-SW-24:1.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-17 1/6
Date Analyzed:	10/02/19	Data File:	100230.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-33-B-15:2	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-18 1/6
Date Analyzed:	10/02/19	Data File:	100231.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-38:2	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-19 1/6
Date Analyzed:	10/02/19	Data File:	100232.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	52	50	150
DBC	64	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-28:3	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-20 1/6
Date Analyzed:	10/02/19	Data File:	100233.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-125	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-21 1/6
Date Analyzed:	10/02/19	Data File:	100238.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-39:1.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-22 1/6
Date Analyzed:	10/02/19	Data File:	100239.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.030

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-40:1.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-23 1/6
Date Analyzed:	10/02/19	Data File:	100240.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	78	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-41:1.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-24 1/6
Date Analyzed:	10/02/19	Data File:	100241.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-29:3	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-25 1/6
Date Analyzed:	10/02/19	Data File:	100242.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	52	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-42:0.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-26 1/6
Date Analyzed:	10/02/19	Data File:	100243.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.77 ve

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-43:0.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-27 1/6
Date Analyzed:	10/02/19	Data File:	100244.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.19

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-44:1	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-28 1/60
Date Analyzed:	10/07/19	Data File:	100727.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72 d	50	150
DBC	75 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.75

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-30:1.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-29 1/6
Date Analyzed:	10/02/19	Data File:	100247.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.55

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-31:2	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-30 1/6
Date Analyzed:	10/02/19	Data File:	100248.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.32

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-32:2	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-31 1/6
Date Analyzed:	10/02/19	Data File:	100249.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.014

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-45:0.8	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-32 1/6
Date Analyzed:	10/03/19	Data File:	100250.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-46:0.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-33 1/6
Date Analyzed:	10/03/19	Data File:	100251.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.058

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-33:2	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-34 1/6
Date Analyzed:	10/03/19	Data File:	100252.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-34:2	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-35 1/6
Date Analyzed:	10/03/19	Data File:	100253.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.072

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-126	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-36 1/6
Date Analyzed:	10/03/19	Data File:	100254.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-27:0.5	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-37 1/6
Date Analyzed:	10/03/19	Data File:	100255.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.076

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-19:2	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-38 1/6
Date Analyzed:	10/03/19	Data File:	100256.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-28:1	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-39 1/60
Date Analyzed:	10/07/19	Data File:	100728.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79 d	50	150
DBC	83 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.78

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-29:1	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-40 1/6
Date Analyzed:	10/03/19	Data File:	100258.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-30:1	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-41 1/6
Date Analyzed:	10/03/19	Data File:	100310.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-31:1	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-42 1/6
Date Analyzed:	10/03/19	Data File:	100320.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	72	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.018

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-20:2	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-43 1/6
Date Analyzed:	10/03/19	Data File:	100311.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-127	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-44 1/6
Date Analyzed:	10/03/19	Data File:	100312.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-26:0.8	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-45 1/6
Date Analyzed:	10/03/19	Data File:	100313.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.046

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-B-18:2	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-46 1/6
Date Analyzed:	10/03/19	Data File:	100314.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-27:0.8	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-47 1/6
Date Analyzed:	10/03/19	Data File:	100315.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-25-SW-28:0.8	Client:	Environmental Partners
Date Received:	09/30/19	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	909522-48 1/6
Date Analyzed:	10/03/19	Data File:	100316.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	09-2408 mb 1/6
Date Analyzed:	10/02/19	Data File:	100205.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	93	50	150
DBC	102	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	09-2409 mb 1/6
Date Analyzed:	10/02/19	Data File:	100234.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 909522
Date Extracted:	10/01/19	Lab ID:	09-2410 mb 1/6
Date Analyzed:	10/03/19	Data File:	100307.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/09/19

Date Received: 09/30/19

Project: Brookdale 74001, F&BI 909522

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 909522-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.084	68 b	49 b	45-130	32 b

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	98	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/09/19

Date Received: 09/30/19

Project: Brookdale 74001, F&BI 909522

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 909522-21 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	80	73	45-130	9

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	88	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/09/19

Date Received: 09/30/19

Project: Brookdale 74001, F&BI 909522

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 909522-41 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	84	85	45-130	1

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

909522

SAMPLE CHAIN OF CUSTODY

ME 09/30/19

Bos 5

Report to Thom Mearin, Charles McEaddenCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 370-0100 Email thom@ep1-wa.comCharles McEaddenSAMPLERS (signature) [Signature]

PROJECT NAME

Breckleale

PO #

74001

REMARKS

INVOICE TO

Ichijo USA

TURNAROUND TIME

☒ Standard Turnaround
☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days
☒ Archive Samples
☐ Other _____

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-30-SW-12-0.5	01	09/30/19	0815	Soil	1							X	
A01-30-SW-13-0.5	02		0816		1								
A01-30-SW-14-0.5	03		0817		1								
A01-30-B-9:1	04		0820		1								
A01-35-SW-17:1	05		0845		1								
A01-35-SW-18:1	06		0846		1								
A01-35-SW-19:1	07		0848		1								
A01-35-B-13:2	08		0849		1								
A01-35-B-14:2	09		0850		1								
DUP-124	10				1								

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: [Signature]Rebecca PereiraEP109/30/191700Received by: [Signature]Alan PhamF&B I09/30/191700

Relinquished by: _____

Samples received at _____

5⁰⁰

Received by: _____

909522

SAMPLE CHAIN OF CUSTODY ME 09/30/19

Page # 2 of 5

Report To Thom Mason, Charles McFaddenCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425)345-0000 Email thom@ep1-wa.comCharles McFadden

SAMPLERS (signature) <u>Thom Mason</u>		PO #
PROJECT NAME		
REMARKS <u>Backdale</u>		INVOICE TO <u>74001</u>
		<u>Idiye</u>
		<u>USA</u>

TURNAROUND TIME	
<input checked="" type="checkbox"/> Standard Turnaround	
<input type="checkbox"/> RUSH	
Rush charges authorized by: _____	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	
<input checked="" type="checkbox"/> Archive Samples	
<input type="checkbox"/> Other _____	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-34-SW-13-0.8	11	09/30/19	0910	Soil	1							X	
A01-34-SW-14-0.5	12		0912										
A01-34-SW-15-0.5	13		0913										
A01-34-B-6:1	14		0915										
A01-33-SW-22-1.5	15		0926										
A01-33-SW-23-1.5	16		0927										
A01-33-SW-24-1.5	17		0929										
A01-33-B-15-2	18		0930										
A01-27-SW-38-2	19		0952										
A01-27-B-28-3	20		0955										

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	Rebecca Becerra	EP1	09/30/19	
Received by: <u>[Signature]</u>	Thom Mason	EP1	09/30/19	1700
Relinquished by:				
Received by:		Samples received at	5 °C	

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

909522

SAMPLE CHAIN OF CUSTODY

ME 09/30/19

805

Page # 3 of 5

Report To Thom Train, Charles McFaddenCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98037Phone (425) 395-0000 Email thom@ep1-wa.comCharles McFadden

SAMPLERS (signature) <u>[Signature]</u>		PO # <u>41001</u>
PROJECT NAME <u>Brookdale</u>	INVOICE TO <u>Ichijo USA</u>	
REMARKS	TURNAROUND TIME	

<input checked="" type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH Rush charges authorized by:	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other
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Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
Duo-125	21	09/30/19	—	Soil	1							X	
A01-27-SW-39.1.5	22		1002										
A01-27-SW-40.1.5	23		1004										
A01-27-SW-41.1.5	24		1006										
A01-27-B-29.3	25		1007										
A01-27-SW-42.0.5	26		1030										
A01-27-SW-43.0.5	27		1032										
A01-27-SW-44.1	28		1035										
A01-27-B-30.1.5	29		1036										
A01-27-B-31.2	30		1038										

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>[Signature]</u>		Rebecca Pereira		EP1		09/30/19			
Received by: <u>[Signature]</u>		Nhan Phan		FCBI		9/30/19		1700	
Relinquished by:									
Received by:				Samples received at		5		°C	

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

909522

SAMPLE CHAIN OF CUSTODY

ME 09/30/19

Box 4

Page # 4 of 5

Report To: Thom Merrin; Charles McFaddenCompany: EP1Address: 1180 NW Maple St, Ste 310City, State, ZIP: Issaquah, WA 98027Phone: (425) 355-0010 Email: thom@ep1-wa.comchar.mcfadden@ep1-wa.comSAMPLERS (signature) [Signature]PROJECT NAME: Brookdale

PO #

REMARKS

INVOICE TO

74001
Chigo
USA

ANALYSES REQUESTED

TURNAROUND TIME
☒ Standard Turnaround
☐ RUSH
Rush charges authorized by: _____
SAMPLE DISPOSAL
☐ Dispose after 30 days
☒ Archive Samples
☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Notes
A01-27-B-32:2	31	09/30/19	1040	Soil	1							X	
A01-27-SW-45:0.8	32		1047										
A01-27-SW-46:0.5	33		1048										
A01-27-B-33:2	34		1050										
A01-27-B-34:2	35		1052										
DUP-126	36		—										
A01-26-SW-27:0.5	37		1128										
A01-26-B-19:2	38		1129										
A01-26-SW-28:1	39		1130										
A01-26-SW-29:1	40		1132										

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: <u>[Signature]</u>	PRINT NAME: <u>Rebecca Becerra</u>	COMPANY: <u>EP1</u>	DATE: <u>09/30/19</u>	TIME: <u></u>
Received by: <u>[Signature]</u>	PRINT NAME: <u>Rebecca Becerra</u>	COMPANY: <u>EP1</u>	DATE: <u>09/30/19</u>	TIME: <u>1700</u>
Relinquished by: <u></u>	PRINT NAME: <u></u>	COMPANY: <u></u>	DATE: <u></u>	TIME: <u></u>
Received by: <u></u>	PRINT NAME: <u></u>	COMPANY: <u></u>	DATE: <u></u>	TIME: <u></u>

Samples received at 5 ⁰⁰

Page # 2 of 2Page # 2 of 2
TURNAROUND TIME

☒ Standard Turnaround
☐ RUSH _____

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples
☐ Other _____

ANALYSES REQUESTED

[illegible]

112

170

5

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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

October 10, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 910039

Dear Mr Morin:

Included are the results from the testing of material submitted on October 1, 2019 from the Brookdale 74001, F&BI 910039 project. There are 64 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Charles McFadden
EPI1010R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on October 1, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 910039 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
910039 -01	AOI-23-B-22:2.5
910039 -02	AOI-23-B-23:3
910039 -03	AOI-23-B-24:2
910039 -04	AOI-23-SW-35:1.5
910039 -05	AOI-23-SW-36:1.5
910039 -06	AOI-23-SW-37:2
910039 -07	AOI-23-SW-38:0.5
910039 -08	AOI-23-SW-39:1
910039 -09	AOI-23-SW-40:0.5
910039 -10	AOI-23-SW-41:0.5
910039 -11	DUP-128
910039 -12	AOI-22-SW-18:0.5
910039 -13	AOI-22-B-15:2
910039 -14	AOI-20-SW-22:2
910039 -15	AOI-20-B-17:3
910039 -16	AOI-20-SW-23:2
910039 -17	AOI-20-SW-24:2
910039 -18	AOI-19-SW-14:0.5
910039 -19	AOI-19-SW-15:0.5
910039 -20	AOI-19-SW-16:0.5
910039 -21	AOI-19-SW-17:1
910039 -22	AOI-19-SW-18:1
910039 -23	AOI-19-B-8:2
910039 -24	AOI-19-B-9:2.5
910039 -25	DUP-129
910039 -26	AOI-16-B-10:4
910039 -27	AOI-16-B-12:1
910039 -28	AOI-16-SW-22:3
910039 -29	AOI-16-SW-23:0.5
910039 -30	AOI-16-SW-24:0.5
910039 -31	AOI-13-SW-14:0.5
910039 -32	AOI-13-SW-15:0.8
910039 -33	AOI-13-SW-16:0.5
910039 -34	AOI-13-B-12:1.5
910039 -35	DUP-130
910039 -36	DUP-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Partners</u>
910039 -37	AOI-11-SW-33:1
910039 -38	AOI-11-SW-34:1
910039 -39	AOI-11-B-17:2
910039 -40	AOI-11-SW-35:0.5
910039 -41	AOI-11-SW-36:0.5
910039 -42	AOI-11-B-18:1
910039 -43	AOI-11-SW-37:2
910039 -44	AOI-11-SW-38:2
910039 -45	AOI-11-B-19:3
910039 -46	AOI-11-SW-39:3
910039 -47	AOI-11-SW-40:3
910039 -48	AOI-11-SW-41:3
910039 -49	AOI-11-B-20:4
910039 -50	AOI-8-SW-26:2
910039 -51	AOI-8-SW-27:2
910039 -52	AOI-8-SW-28:2
910039 -53	AOI-8-B-17:3

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-22:2.5	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-01 1/6
Date Analyzed:	10/04/19	Data File:	100406.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.017

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-23:3	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-02 1/6
Date Analyzed:	10/04/19	Data File:	100407.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-24:2	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-03 1/6
Date Analyzed:	10/04/19	Data File:	100408.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	73	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-35:1.5	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-04 1/6
Date Analyzed:	10/04/19	Data File:	100409.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-36:1.5	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-05 1/6
Date Analyzed:	10/04/19	Data File:	100410.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.047

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-37:2	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-06 1/6
Date Analyzed:	10/04/19	Data File:	100411.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-38:0.5	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-07 1/60
Date Analyzed:	10/07/19	Data File:	100729.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60 d	50	150
DBC	66 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	3.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-39:1	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-08 1/6
Date Analyzed:	10/04/19	Data File:	100413.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.095

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-40:0.5	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-09 1/6
Date Analyzed:	10/04/19	Data File:	100414.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-41:0.5	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-10 1/6
Date Analyzed:	10/04/19	Data File:	100415.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-128	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-11 1/6
Date Analyzed:	10/04/19	Data File:	100416.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-SW-18:0.5	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-12 1/6
Date Analyzed:	10/04/19	Data File:	100421.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-22-B-15:2	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-13 1/6
Date Analyzed:	10/04/19	Data File:	100423.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-22:2	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-14 1/6
Date Analyzed:	10/04/19	Data File:	100424.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.15

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-17:3	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-15 1/6
Date Analyzed:	10/04/19	Data File:	100425.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-23:2	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-16 1/6
Date Analyzed:	10/04/19	Data File:	100426.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-24:2	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-17 1/6
Date Analyzed:	10/04/19	Data File:	100427.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.018

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-SW-14:0.5	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-18 1/6
Date Analyzed:	10/04/19	Data File:	100433.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-SW-15:0.5	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-19 1/6
Date Analyzed:	10/04/19	Data File:	100434.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-SW-16:0.5	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-20 1/6
Date Analyzed:	10/04/19	Data File:	100435.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-SW-17:1	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-21 1/6
Date Analyzed:	10/04/19	Data File:	100436.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-SW-18:1	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-22 1/6
Date Analyzed:	10/04/19	Data File:	100437.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-B-8:2	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-23 1/6
Date Analyzed:	10/04/19	Data File:	100438.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-19-B-9:2.5	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-24 1/6
Date Analyzed:	10/04/19	Data File:	100439.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-129	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-25 1/6
Date Analyzed:	10/04/19	Data File:	100440.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-B-10:4	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-26 1/6
Date Analyzed:	10/04/19	Data File:	100441.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	58	50	150
DBC	74	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-B-12:1	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-27 1/6
Date Analyzed:	10/04/19	Data File:	100442.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-22:3	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-28 1/6
Date Analyzed:	10/04/19	Data File:	100443.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-23:0.5	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-29 1/6
Date Analyzed:	10/04/19	Data File:	100444.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.062

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-24:0.5	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-30 1/60
Date Analyzed:	10/08/19	Data File:	100824.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72 d	50	150
DBC	82 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	1.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-SW-14:0.5	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-31 1/6
Date Analyzed:	10/04/19	Data File:	100446.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-SW-15:0.8	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-32 1/6
Date Analyzed:	10/07/19	Data File:	100716.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-SW-16:0.5	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-33 1/6
Date Analyzed:	10/07/19	Data File:	100719.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-13-B-12:1.5	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-34 1/6
Date Analyzed:	10/07/19	Data File:	100720.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-130	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-35 1/6
Date Analyzed:	10/07/19	Data File:	100721.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-131	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-36 1/6
Date Analyzed:	10/07/19	Data File:	100722.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	106	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-33:1	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-37 1/6
Date Analyzed:	10/07/19	Data File:	100723.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	88	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.071

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-34:1	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-38 1/6
Date Analyzed:	10/07/19	Data File:	100724.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-17:2	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-39 1/6
Date Analyzed:	10/07/19	Data File:	100725.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.023

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-35:0.5	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-40 1/6
Date Analyzed:	10/07/19	Data File:	100731.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.039

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-36:0.5	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-41 1/6
Date Analyzed:	10/07/19	Data File:	100732.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	100	50	150
DBC	107	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.023

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-18:1	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-42 1/6
Date Analyzed:	10/07/19	Data File:	100733.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-37:2	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-43 1/6
Date Analyzed:	10/07/19	Data File:	100740.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-38:2	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-44 1/6
Date Analyzed:	10/07/19	Data File:	100741.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-19:3	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-45 1/6
Date Analyzed:	10/07/19	Data File:	100742.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-39:3	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-46 1/6
Date Analyzed:	10/07/19	Data File:	100743.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-40:3	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-47 1/6
Date Analyzed:	10/07/19	Data File:	100744.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-41:3	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-48 1/6
Date Analyzed:	10/07/19	Data File:	100745.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-20:4	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-49 1/6
Date Analyzed:	10/07/19	Data File:	100746.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-26:2	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-50 1/6
Date Analyzed:	10/07/19	Data File:	100747.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	101	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-27:2	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-51 1/6
Date Analyzed:	10/07/19	Data File:	100748.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	147	50	150
DBC	173	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-SW-28:2	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/03/19	Lab ID:	910039-52 1/6
Date Analyzed:	10/08/19	Data File:	100817.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-8-B-17:3	Client:	Environmental Partners
Date Received:	10/01/19	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	910039-53 1/6
Date Analyzed:	10/07/19	Data File:	100730.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	09-2410 mb2 1/6
Date Analyzed:	10/04/19	Data File:	100405.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	09-2416 mb 1/6
Date Analyzed:	10/04/19	Data File:	100417.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	100	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/02/19	Lab ID:	09-2417 mb 1/6
Date Analyzed:	10/07/19	Data File:	100715A.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	183 vo	50	150
DBC	214 vo	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 910039
Date Extracted:	10/03/19	Lab ID:	09-2418 mb 1/6
Date Analyzed:	10/08/19	Data File:	100810.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/10/19

Date Received: 10/01/19

Project: Brookdale 74001, F&BI 910039

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 909522-41 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	84	85	45-130	1

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/10/19

Date Received: 10/01/19

Project: Brookdale 74001, F&BI 910039

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 910039-12 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	0.019	93	89	45-130	4

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	90	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/10/19

Date Received: 10/01/19

Project: Brookdale 74001, F&BI 910039

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 910039-32 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	89	86	45-130	3

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	127	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/10/19

Date Received: 10/01/19

Project: Brookdale 74001, F&BI 910039

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 910039-52 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	97	96	45-130	1

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	97	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

910039

SAMPLE CHAIN OF CUSTODY

ME 10/1/19

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Page # 1 of 6

Report To: Thom Morin; Charles McFaddenCompany: EPIAddress: 1180 NW Maple St. Ste 310City, State, ZIP: Issaquah, WA 98027Phone: (425) 395-0016 Email: thom.morin@epi-wa.comCharles McFadden epi-wa.com

SAMPLERS (signature) <u>Robert Bevan</u>		PO #
PROJECT NAME	<u>Redale</u>	74001
REMARKS	INVOICE TO <u>14110 USA</u>	

TURNAROUND TIME	<input checked="" type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH Rush charges authorized by: _____
SAMPLE DISPOSAL	<input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-23-B-22:2.5	01	10/1/19	0910	Soil	1							X	
A01-23-B-23:3	02		0915		1								
A01-23-B-24:2	03		0916		1								
A01-23-SW-35:1.5	04		0918		1								
A01-23-SW-36:1.5	05		0919		1								
A01-23-SW-37:2	06		0920		1								
A01-23-SW-38:0.5	07		0921		1								
A01-23-SW-39:1	08		0925		1								
A01-23-SW-40:0.5	09		0930		1								
A01-23-SW-41:0.5	10		0935		1								

Samples received at 4 °C

SIGNATURE

Relinquished by:

Robert Bevan

PRINT NAME

Robert Bevan

COMPANY

EPI

DATE

10/1/19

TIME

15003012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Friedman & Bruya, Inc.

Relinquished by:

Michael EngleMichael Engle

Relinquished by:

Received by:

910039

SAMPLE CHAIN OF CUSTODY

ME 10/01/19

Page # 2 of 10

Report To Thom Merrin, Charles McFadden

Company EP1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 555-4010 Email thom@ep1-wa.com

Charles McFadden



SAMPLERS (signature) <i>Rebecca Bore</i>		PO #
PROJECT NAME <u>Brockdale</u>		INVOICE TO <u>14001</u>
REMARKS		INVOICE TO <u>14001</u>
<input checked="" type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH Rush charges authorized by:		SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Dieldrin (Method 8260)			
DUP-128	11	10/1/19	—	Soil	1								X			
A01-22-SW-18:0.5	12		0940													
A01-22-B-15:2	13		0945													
A01-20-SW-22:2	14		1005													
A01-20-B-17:3	15		1007													
A01-20-SW-23:2	16		1008													
A01-20-SW-24:2	17		1011													
A01-19-SW-14:0.5	18		1035													
A01-19-SW-15:0.5	19		1038													
A01-19-SW-16:0.5	20		1040													

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <i>Rebecca Bore</i>		Rebecca Bore		EP1		10/1/19	1600
Received by: <i>Michael Eddy</i>		Michael Eddy		Field		10/1/19	1600
Received by:							

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

☐ Other

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Rebecca Berrera	EBI	10/11/19	1600
Received by: 	Michael Edel	FLBIZ	↓	1000
Relinquished by:				
Received by:				

910039

SAMPLE CHAIN OF CUSTODY

ME 10/01/19

Page # 4 of 6

Report To Thom Morin, Charles McEaddenCompany EP1Address 1180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-6906 Email thommo@ep1-wa.com
charlesm@ep1-wa.com

SAMPLERS (signature) <u>Rebecca</u>		PO # <u>74001</u>
PROJECT NAME <u>Breckdale</u>		INVOICE TO <u>Idmigo USA</u>
REMARKS		

TURNAROUND TIME	SAMPLE DISPOSAL
<input checked="" type="checkbox"/> Standard Turnaround	<input type="checkbox"/> Dispose after 30 days
<input type="checkbox"/> RUSH	<input checked="" type="checkbox"/> Archive Samples
Rush charges authorized by: _____	
Other _____	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-13-SW-14:0.5	31	10/1/19	1151	Soil	1							X	
A01-13-SW-15:0.8	32		1155										
A01-13-SW-16:0.5	33		1157										
A01-13-B-12:1.5	34		1200										
DUP-130	35		—										
DUP-131	36		—										
A01-11-SW-33:1	37		1225										
A01-11-SW-34:1	38		1228										
A01-11-B-17:2	39		1231										
A01-11-SW-35:0.5	40		1235										

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <u>Rebecca</u>		<u>Rebecca Pereira</u>		<u>EP1</u>		<u>10/1/19</u>	<u>1600</u>
Received by: <u>Michael</u>		<u>Michael Endel</u>		<u>FILN</u>		<u>10/1/19</u>	<u>1600</u>
Relinquished by:							
Received by:							

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

910039

SAMPLE CHAIN OF CUSTODY

HE 10/01/19

Page # 5 of 6

Report To Thom Morin; Charles McCaddenCompany EPIAddress 180 NW Maple St, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 315-0010 Email thom.morin@epi-wa.com

SAMPLERS (signature) <u>Rebecca</u>		PO #
PROJECT NAME <u>Brookdale</u>		74001
REMARKS	INVOICE TO <u>14145 USA</u>	

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other _____

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	
A01-11-SW-36:0.5	41	10/1/19	1240	Soil	1							X	
A01-11-B-18:1	42		1241										
A01-11-SW-37:2	43		1242										
A01-11-SW-38:2	44		1243										
A01-11-B-19:3	45		1250										
A01-11-SW-39:3	46		1254										
A01-11-SW-40:3	47		1255										
A01-11-SW-41:3	48		1259										
A01-11-B-20:4	49		1300										
A01-8-SW-26:2	50		1345										

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>Rebecca</u>		Rebecca Becerra		EPI		10/1/19		1600	
Received by: <u>Michael</u>		Michael Ellis		EPI		10/1/19		1600	
Relinquished by:									
Received by:									

Friedman & Bryna, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282

40

ME 10/01/19

6 of 6

Page # 6 of 6
TURNAROUND TIME

☒ Standard Turnaround
☐ RUSH_____

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples
☐ Other

Report To Therm Menin, Charles McTadden

Company EP 1

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98007

Phone (425) 345-0000 Email therm@epi-wa.com

Charles McTadden

SAMPLERS (signature)	
PROJECT NAME	PO #
<u>Brookdale</u>	<u>74001</u>
REMARKS	INVOICE TO
	<u>1 chris</u>
	<u>USA</u>

Page # 6 of 6

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Archive Samples

☐ Other _____

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

October 14, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: Brookdale 74001, F&BI 910066

Dear Mr Morin:

Included are the results from the testing of material submitted on October 2, 2019 from the Brookdale 74001, F&BI 910066 project. There are 28 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Charles McFadden
EPI1014R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on October 2, 2019 by Friedman & Bruya, Inc. from the Environmental Partners Brookdale 74001, F&BI 910066 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
910066 -01	AOI-7-SW-25:1.2
910066 -02	AOI-7-SW-26:1.2
910066 -03	AOI-7-SW-27:1.2
910066 -04	AOI-7-B-16:2.5
910066 -05	AOI-5-SW-14:1
910066 -06	AOI-5-B-11:2.5
910066 -07	AOI-5-SW-15:1
910066 -08	AOI-5-SW-16:1
910066 -09	AOI-5-SW-17:1
910066 -10	AOI-5-B-12:2.5
910066 -11	DUP-132
910066 -12	AOI-3-SW-4:0.5
910066 -13	AOI-3-SW-5:0.5
910066 -14	AOI-3-SW-6:1
910066 -15	AOI-3-SW-7:1
910066 -16	AOI-3-SW-8:1
910066 -17	AOI-3-B-2:3
910066 -18	AOI-3-B-3:2
910066 -19	AOI-4-B-24:3.5
910066 -20	AOI-5-SW-18:1
910066 -21	AOI-5-B-13:2.5
910066 -22	DUP-133

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-25:1.2	Client:	Environmental Partners
Date Received:	10/02/19	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	910066-01 1/6
Date Analyzed:	10/07/19	Data File:	100751.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-26:1.2	Client:	Environmental Partners
Date Received:	10/02/19	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	910066-02 1/6
Date Analyzed:	10/07/19	Data File:	100735.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	55	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-SW-27:1.2	Client:	Environmental Partners
Date Received:	10/02/19	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	910066-03 1/6
Date Analyzed:	10/07/19	Data File:	100736.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	72	50	150
DBC	92	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-7-B-16:2.5	Client:	Environmental Partners
Date Received:	10/02/19	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	910066-04 1/6
Date Analyzed:	10/07/19	Data File:	100737.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-SW-14:1	Client:	Environmental Partners
Date Received:	10/02/19	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	910066-05 1/6
Date Analyzed:	10/07/19	Data File:	100738.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-B-11:2.5	Client:	Environmental Partners
Date Received:	10/02/19	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	910066-06 1/6
Date Analyzed:	10/07/19	Data File:	100739.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-SW-15:1	Client:	Environmental Partners
Date Received:	10/02/19	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	910066-07 1/6
Date Analyzed:	10/08/19	Data File:	100825.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-SW-16:1	Client:	Environmental Partners
Date Received:	10/02/19	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	910066-08 1/6
Date Analyzed:	10/08/19	Data File:	100826.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-SW-17:1	Client:	Environmental Partners
Date Received:	10/02/19	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	910066-09 1/6
Date Analyzed:	10/08/19	Data File:	100827.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-B-12:2.5	Client:	Environmental Partners
Date Received:	10/02/19	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	910066-10 1/6
Date Analyzed:	10/08/19	Data File:	100828.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-132	Client:	Environmental Partners
Date Received:	10/02/19	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	910066-11 1/6
Date Analyzed:	10/08/19	Data File:	100829.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-3-SW-4:0.5	Client:	Environmental Partners
Date Received:	10/02/19	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	910066-12 1/6
Date Analyzed:	10/08/19	Data File:	100830.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.093

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-3-SW-5:0.5	Client:	Environmental Partners
Date Received:	10/02/19	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	910066-13 1/6
Date Analyzed:	10/08/19	Data File:	100831.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.021

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-3-SW-6:1	Client:	Environmental Partners
Date Received:	10/02/19	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	910066-14 1/120
Date Analyzed:	10/11/19	Data File:	101105.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68 d	50	150
DBC	84 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	3.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-3-SW-7:1	Client:	Environmental Partners
Date Received:	10/02/19	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	910066-15 1/120
Date Analyzed:	10/11/19	Data File:	101106.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66 d	50	150
DBC	79 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	8.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-3-SW-8:1	Client:	Environmental Partners
Date Received:	10/02/19	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	910066-16 1/120
Date Analyzed:	10/11/19	Data File:	101107.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67 d	50	150
DBC	76 d	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	5.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-3-B-2:3	Client:	Environmental Partners
Date Received:	10/02/19	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	910066-17 1/6
Date Analyzed:	10/08/19	Data File:	100835.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-3-B-3:2	Client:	Environmental Partners
Date Received:	10/02/19	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	910066-18 1/6
Date Analyzed:	10/08/19	Data File:	100836.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.019

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-4-B-24:3.5	Client:	Environmental Partners
Date Received:	10/02/19	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	910066-19 1/6
Date Analyzed:	10/08/19	Data File:	100837.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-SW-18:1	Client:	Environmental Partners
Date Received:	10/02/19	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	910066-20 1/6
Date Analyzed:	10/08/19	Data File:	100838.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.076

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-B-13:2.5	Client:	Environmental Partners
Date Received:	10/02/19	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	910066-21 1/6
Date Analyzed:	10/08/19	Data File:	100839.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.024

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	DUP-133	Client:	Environmental Partners
Date Received:	10/02/19	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	910066-22 1/6
Date Analyzed:	10/08/19	Data File:	100840.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	61	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	09-2418 mb 1/6
Date Analyzed:	10/08/19	Data File:	100810.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	104	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Brookdale 74001, F&BI 910066
Date Extracted:	10/03/19	Lab ID:	09-2433 mb 1/6
Date Analyzed:	10/07/19	Data File:	100750.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	98	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/14/19

Date Received: 10/02/19

Project: Brookdale 74001, F&BI 910066

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 910039-52 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	97	96	45-130	1

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	97	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/14/19

Date Received: 10/02/19

Project: Brookdale 74001, F&BI 910066

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 910066-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	84	86	45-130	2

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	93	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

910066

SAMPLE CHAIN OF CUSTODY

ME 10/2/19

204

Page # 1 of 3

Report To Thom Main, Charles McFadden

Company EPI

Address 180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email thom@epi-wa.com

Charles McFadden

SAMPLERS (signature) <u>Rebecca Breen</u>		PO #
PROJECT NAME <u>Breckdale</u>		INVOICE TO <u>24601</u>
REMARKS		INVOICE TO <u>10/2/19</u>
		USA

TURNAROUND TIME	
<input checked="" type="checkbox"/> Standard Turnaround	
<input type="checkbox"/> RUSH	
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input type="checkbox"/> Dispose after 30 days	
<input checked="" type="checkbox"/> Archive Samples	
<input type="checkbox"/> Other	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM				
A01-7-SW-25:1.2	01	10/2/19	0835	Soil	1											X
A01-7-SW-26:1.2	02		0837													
A01-7-SW-27:1.2	03		0839													
A01-7-B-16:2.5	04		0841													
A01-5-SW-14:1	05		0915													
A01-5-B-11:2.5	06		0917													
A01-5-SW-15:1	07		0920													
A01-5-SW-16:1	08		0923													
A01-5-SW-17:1	09		0925													
A01-5-B-12:2.5	10		0928													

Samples received at 4 06

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>Rebecca Breen</u>		Rebecca Breen		EPI		10/2/19		1700	
Received by: <u>Michael Edell</u>		Michael Edell		Fib		10/2/19		4	
Relinquished by:									
Received by:									

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

910 266

SAMPLE CHAIN OF CUSTODY

ME 10/2/14

Page # 2 of 3

C04

Report To Thom Marin; Charles McEaddenCompany EP1Address 1180 NW Maple St SE, Ste 310City, State, ZIP Issaquah, WA 98027Phone (425) 395-0310 Email thommarin@ep1.comCharles McEadden

SAMPLERS (signature) <u>Rebecca Brecken</u>	
PROJECT NAME <u>Brockdale</u>	PO # <u>74001</u>
REMARKS	INVOICE TO <u>Idaho USA</u>

TURNAROUND TIME <input checked="" type="checkbox"/> Standard Turnaround <input type="checkbox"/> RUSH Rush charges authorized by: _____	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Archive Samples <input type="checkbox"/> Other _____
--	--

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Pieldrin (Method 8261)			
DUE-132	11	10/2/14	—	Soil	1								X			
A01-3-SW-4:0.5	12		1015		1											
A01-3-SW-5:0.5	13		1018		1											
A01-3-SW-6:1	14		1025		1											
A01-3-SW-7:1	15		1027		1											
A01-3-SW-8:1	16		1029		1											
A01-3-B-2:3	17		1030		1											
A01-3-B-3:2	18		1035		1											
A01-4-B-24:3.5	19		1100		1											
A01-5-SW-18:1	20		1236		1											

SIGNATURE

PRINT NAME

COMPANY

DATE TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: <u>Rebecca Brecken</u>	PRINT NAME: <u>Rebecca Brecken</u>	COMPANY: <u>EP1</u>	DATE: <u>10/2/14</u>	TIME: <u>1400</u>
Received by: <u>[Signature]</u>	<u>M. Dulicelli</u>		<u>10/2/14</u>	<u>1</u>
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

November 6, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 74001, F&BI 910584

Dear Mr Morin:

Included are the results from the testing of material submitted on October 30, 2019 from the 74001, F&BI 910584 project. There are 13 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI1106R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on October 30, 2019 by Friedman & Bruya, Inc. from the Environmental Partners 74001, F&BI 910584 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
910584-01	EX-2-SW-1:1.5
910584-02	EX-2-SW-2:1.5
910584-03	EX-2-SW-3:1.5
910584-04	EX-2-SW-4:1.5
910584-05	EX-2-B-1:3
910584-06	EX-1-SW-1:1.5
910584-07	EX-1-SW-2:1.5
910584-08	EX-1-SW-3:1.5
910584-09	EX-1-SW-4:1.5
910584-10	EX-1-B-1:3

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/06/19
Date Received: 10/30/19
Project: 74001, F&BI 910584
Date Extracted: 10/31/19
Date Analyzed: 11/01/19

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING METHOD NWTPH-G_x**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate (% Recovery) (Limit 50-150)
EX-1-SW-1:1.5 910584-06	<5	109
EX-1-SW-2:1.5 910584-07	<5	112
EX-1-SW-3:1.5 910584-08	<5	111
EX-1-SW-4:1.5 910584-09	<5	112
EX-1-B-1:3 910584-10	<5	113
Method Blank	<5	110

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/06/19
Date Received: 10/30/19
Project: 74001, F&BI 910584
Date Extracted: 10/30/19
Date Analyzed: 10/30/19

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 56-165)
EX-2-SW-1:1.5 910584-01	<50	<250	85
EX-2-SW-2:1.5 910584-02	<50	<250	94
EX-2-SW-3:1.5 910584-03	<50	<250	93
EX-2-SW-4:1.5 910584-04	<50	<250	97
EX-2-B-1:3 910584-05	<50	<250	84
EX-1-SW-1:1.5 910584-06	<50	<250	85
EX-1-SW-2:1.5 910584-07	<50	<250	84
EX-1-SW-3:1.5 910584-08	110	<250	94
EX-1-SW-4:1.5 910584-09	<50	<250	93
EX-1-B-1:3 910584-10	<50	<250	94
Method Blank 09-2675 MB	<50	<250	85

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	EX-2-SW-1:1.5	Client:	Environmental Partners
Date Received:	10/30/19	Project:	74001, F&BI 910584
Date Extracted:	11/01/19	Lab ID:	910584-01 1/6
Date Analyzed:	11/01/19	Data File:	110129.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	EX-2-SW-2:1.5	Client:	Environmental Partners
Date Received:	10/30/19	Project:	74001, F&BI 910584
Date Extracted:	11/01/19	Lab ID:	910584-02 1/6
Date Analyzed:	11/01/19	Data File:	110130.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	106	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	EX-2-SW-3:1.5	Client:	Environmental Partners
Date Received:	10/30/19	Project:	74001, F&BI 910584
Date Extracted:	11/01/19	Lab ID:	910584-03 1/6
Date Analyzed:	11/01/19	Data File:	110131.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	108	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	EX-2-SW-4:1.5	Client:	Environmental Partners
Date Received:	10/30/19	Project:	74001, F&BI 910584
Date Extracted:	11/01/19	Lab ID:	910584-04 1/6
Date Analyzed:	11/01/19	Data File:	110132.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	109	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	EX-2-B-1:3	Client:	Environmental Partners
Date Received:	10/30/19	Project:	74001, F&BI 910584
Date Extracted:	11/01/19	Lab ID:	910584-05 1/6
Date Analyzed:	11/01/19	Data File:	110133.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	111	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 910584
Date Extracted:	11/01/19	Lab ID:	09-2690 mb 1/6
Date Analyzed:	11/01/19	Data File:	110117.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	88	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/06/19

Date Received: 10/30/19

Project: 74001, F&BI 910584

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR TPH AS GASOLINE
USING METHOD NWTPH-G_x**

Laboratory Code: 910583-04 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	20	110	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/06/19

Date Received: 10/30/19

Project: 74001, F&BI 910584

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-D_x**

Laboratory Code: 910584-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	106	96	63-146	10

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	96	79-144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/06/19

Date Received: 10/30/19

Project: 74001, F&BI 910584

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 910520-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	96	92	45-130	4

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	92	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CHAIN OF CUSTODY

ME 10-30-19 1 of 1 P03

910584

Report To Ther Morrison aka McFadden

Company EPL

Address 1180 NW Maple St Ste 310

City, State, ZIP Issaquah, Wa 98027

Phone 425-345-0010 Email _____

SAMPLERS (signature) <u>Charles McFadden</u>		PO #
PROJECT NAME <u>74001</u>	INVOICE TO	
REMARKS	PROJECT specific RLS? - Yes / No	

TURNAROUND TIME <input checked="" type="checkbox"/> Standard turnaround <input type="checkbox"/> RUSH Rush charges authorized by: _____	SAMPLE DISPOSAL <input type="checkbox"/> Archive samples <input type="checkbox"/> Other _____ Default: Dispose after 30 days
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ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Dieldrin	Notes
EX-2-SW-1-1.5	01	10/24/19	1005	Soil	1	X							X	
EX-2-SW-2-1.5	02		1010		1	X							X	
EX-2-SW-3-1.5	03		1015		1	X							X	
EX-2-SW-4-1.5	04		1020		1	X							X	
EX-2-B-1-1.3	05		1025		1	X							X	
EX-1-SW-1-1.5	06 A-E		1150		5	X	X							
EX-1-SW-2-1.5	07		1155		5	X	X							
EX-1-SW-3-1.5	08		1200		5	X	X							
EX-1-SW-4-1.5	09		1205		5	X	X							
EX-1-B-1-1.3	10		1210		5	X	X							

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <u>Charles McFadden</u>		Charles McFadden		EPL		10/24/19	
Received by: <u>M. McFadden</u>		M. McFadden		TRB		10/30/19	0630
Relinquished by:							
Received by:				Samples received at			4:00

Friedman & Bruja, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
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November 6, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 74001, F&BI 910620

Dear Mr Morin:

Included are the results from the testing of material submitted on October 31, 2019 from the 74001, F&BI 910620 project. There are 32 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Charles McFadden
EPI1106R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on October 31, 2019 by Friedman & Bruya, Inc. from the Environmental Partners 74001, F&BI 910620 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
910620-01	AOI-5-B-14:2.5
910620-02	AOI-5-SW-19:1
910620-03	AOI-5-SW-20:1
910620-04	AOI-11-B-21:3
910620-05	AOI-11-SW-42:1
910620-06	AOI-11-SW-43:2
910620-07	AOI-16-B-13:1
910620-08	AOI-16-SW-25:0.5
910620-09	AOI-16-SW-26:0.5
910620-10	AOI-20-B-18:3
910620-11	AOI-20-SW-25:2
910620-12	AOI-20-SW-26:2
910620-13	AOI-20-SW-27:2
910620-14	Dup-134
910620-15	AOI-23-B-25:3
910620-16	AOI-23-SW-42:1.5
910620-17	AOI-23-SW-43:1.5
910620-18	AOI-23-B-26:4
910620-19	AOI-23-SW-44:2
910620-20	AOI-23-SW-45:2
910620-21	AOI-23-SW-46:1
910620-22	AOI-26-B-21:1.5
910620-23	Dup-135
910620-24	AOI-26-SW-32:05
910620-25	AOI-26-SW-33:05
910620-26	AOI-26-SW-34:05

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-B-14:2.5	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-01 1/6
Date Analyzed:	11/01/19	Data File:	110138.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	90	50	150
DBC	113	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-SW-19:1	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-02 1/6
Date Analyzed:	11/01/19	Data File:	110139.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-5-SW-20:1	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-03 1/6
Date Analyzed:	11/01/19	Data File:	110140.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-B-21:3	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-04 1/6
Date Analyzed:	11/01/19	Data File:	110141.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	110	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-42:1	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-05 1/6
Date Analyzed:	11/01/19	Data File:	110142.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	110	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-11-SW-43:2	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-06 1/6
Date Analyzed:	11/01/19	Data File:	110143.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	109	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-B-13:1	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-07 1/6
Date Analyzed:	11/01/19	Data File:	110144.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-25:0.5	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-08 1/6
Date Analyzed:	11/04/19	Data File:	110412.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	75	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.015

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-16-SW-26:0.5	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-09 1/6
Date Analyzed:	11/01/19	Data File:	110145.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	108	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-B-18:3	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-10 1/6
Date Analyzed:	11/04/19	Data File:	110413.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-25:2	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-11 1/6
Date Analyzed:	11/04/19	Data File:	110414.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.018

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-26:2	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-12 1/6
Date Analyzed:	11/04/19	Data File:	110415.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-20-SW-27:2	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-13 1/6
Date Analyzed:	11/04/19	Data File:	110416.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75	50	150
DBC	80	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-134	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-14 1/6
Date Analyzed:	11/04/19	Data File:	110417.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-25:3	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-15 1/6
Date Analyzed:	11/04/19	Data File:	110418.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	92	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-42:1.5	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-16 1/6
Date Analyzed:	11/04/19	Data File:	110419.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	85	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-43:1.5	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-17 1/6
Date Analyzed:	11/04/19	Data File:	110420.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	88	50	150
DBC	99	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-B-26:4	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-18 1/6
Date Analyzed:	11/04/19	Data File:	110421.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-44:2	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-19 1/6
Date Analyzed:	11/04/19	Data File:	110422.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	96	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-45:2	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-20 1/6
Date Analyzed:	11/04/19	Data File:	110423.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-23-SW-46:1	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-21 1/6
Date Analyzed:	11/04/19	Data File:	110424.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	87	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-B-21:1.5	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-22 1/6
Date Analyzed:	11/04/19	Data File:	110425.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-135	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-23 1/6
Date Analyzed:	11/04/19	Data File:	110426.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	89	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-32:05	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-24 1/6
Date Analyzed:	11/04/19	Data File:	110427.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-33:05	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-25 1/6
Date Analyzed:	11/04/19	Data File:	110428.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-26-SW-34:05	Client:	Environmental Partners
Date Received:	10/31/19	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	910620-26 1/6
Date Analyzed:	11/04/19	Data File:	110429.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	09-2697 mb 1/6
Date Analyzed:	11/01/19	Data File:	110134.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	96	50	150
DBC	120	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 910620
Date Extracted:	11/01/19	Lab ID:	09-2690 mb 1/6
Date Analyzed:	11/01/19	Data File:	110117.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	88	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/06/19

Date Received: 10/31/19

Project: 74001, F&BI 910620

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 910520-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	96	92	45-130	4

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	92	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/06/19

Date Received: 10/31/19

Project: 74001, F&BI 910620

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 910620-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	100	99	45-130	1

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	90	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

910620

SAMPLE CHAIN OF CUSTODY

ME 10-31-19

1 of 3 p04

Report to: Thom Moran & Charles McEaddenCompany EPIAddress 1180 NW Maple St.City, State, ZIP Issaquah, WAPhone Email Tmoran@epi-wa.com

SAMPLERS (signature) <u> </u>		PO #
PROJECT NAME	74001	
REMARKS	INVOICE TO	
Project specific RLS? - Yes / No		

TURNAROUND TIME
<input type="checkbox"/> Standard turnaround
<input type="checkbox"/> RUSH
Rush charges authorized by: <u> </u>
SAMPLE DISPOSAL
<input type="checkbox"/> Archive samples
<input type="checkbox"/> Other <u> </u>
Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED								Notes
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Dieldrin (Method 8081)	
A01-5-B-14:2.5	01	10/31/19	0825	Soil	1								X	
A01-5-SW-19:1	02		0830		1								X	
A01-5-SW-20:1	03		0835		1								X	
A01-11-B-21:23	04		0845		1								X	
A01-11-SW-42:1	05		0850		1								X	Time on jar 08:55
A01-11-SW-43:2	06		0855		1								X	Time on jar 08:50
A01-16-B-13:1	07		0905		1								X	
A01-16-SW-25:05	08		0910		1								X	
A01-16-SW-26:05	09		0915		1								X	
A01-20-B-18:8	10		0950		1								X	labelled A01-20-B-18:3

SIGNATURE

PRINT NAME

COMPANY

DATE TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: <u> </u>	Eric Krueger	EPI	10/31/19	1338
Received by: <u> </u>	Thom Phan	FEBI	10/31/19	1338
Relinquished by: <u> </u>				
Received by: <u> </u>		Samples received at 3 °C		

910620

SAMPLE CHAIN OF CUSTODY

ME 10-31-19

Page # 2 of 3

DOY

Report To: Thom Morin & Charles McFadden

Company EPI

Address 1180 NW Maple St

City, State, ZIP Issaquah, WA

Phone Email T.Morin@epi-wa.com

SAMPLERS (signature) <i>Eric Krueger</i>		TURNAROUND TIME
PROJECT NAME 74001	PO #	<input type="checkbox"/> Standard turnaround <input type="checkbox"/> RUSH Rush charges authorized by: _____
REMARKS	INVOICE TO	SAMPLE DISPOSAL <input type="checkbox"/> Archive samples <input type="checkbox"/> Other Default: Dispose after 30 days

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Dieldrin (method 8081)	Notes
A01-20-SW-25:2	11	10/31/19	0955	Soil	1								X	
A01-20-SW-26:2	12		1000										X	
A01-20-SW-27:2	13		1005										X	
DUP-134	14												X	
A01-23-B-25:3	15		1020										X	
A01-23-SW-42:1.5	16		1025										X	
A01-23-SW-43:1.5	17		1030										X	
A01-23-SW-26:4	18		1035										X	
A01-23-SW-44:2	19		1040										X	
A01-23-SW-45:2	20		1045										X	

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Relinquished by: <i>Eric Krueger</i>	PRINT NAME	COMPANY	DATE	TIME
Received by: <i>Phan Phan</i>	Phan Phan	EPI	10/31/19	1338
Relinquished by:		FRBI	10/31/19	1338
Received by:				

3 Day 3

Page # 3 of

□ Standard turnaround

Rush charges authorized by:

INVOICE TO

Project specific RLS? - Yes / No

Default: Dispose after 30 days

ANALYSES REQUESTED

[illegible]

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

November 11, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 74001, F&BI 911011

Dear Mr Morin:

Included are the results from the testing of material submitted on November 1, 2019 from the 74001, F&BI 911011 project. There are 18 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Charles McFadden
EPI1111R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on November 1, 2019 by Friedman & Bruya, Inc. from the Environmental Partners 74001, F&BI 911011 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
911011-01	AOI-27-B-30:4
911011-02	AOI-27-B-31:4
911011-03	AOI-27-B-34:4
911011-04	AOI-27-B-35:4
911011-05	AOI-27-B-36:2
911011-06	AOI-27-SW-47:0.5
911011-07	AOI-27-SW-48:0.5
911011-08	AOI-3-B-4:3
911011-09	AOI-3-B-5:3
911011-10	AOI-3-SW-9:0.5
911011-11	AOI-3-SW-10:1
911011-12	AOI-3-SW-11:1
911011-13	Dup-136
911011-14	AOI-3-B-6:0.25

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-30:4	Client:	Environmental Partners
Date Received:	11/01/19	Project:	74001, F&BI 911011
Date Extracted:	11/04/19	Lab ID:	911011-01 1/6
Date Analyzed:	11/05/19	Data File:	110524.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-31:4	Client:	Environmental Partners
Date Received:	11/01/19	Project:	74001, F&BI 911011
Date Extracted:	11/04/19	Lab ID:	911011-02 1/6
Date Analyzed:	11/05/19	Data File:	110527.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-34:4	Client:	Environmental Partners
Date Received:	11/01/19	Project:	74001, F&BI 911011
Date Extracted:	11/04/19	Lab ID:	911011-03 1/6
Date Analyzed:	11/05/19	Data File:	110528.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-35:4	Client:	Environmental Partners
Date Received:	11/01/19	Project:	74001, F&BI 911011
Date Extracted:	11/04/19	Lab ID:	911011-04 1/6
Date Analyzed:	11/05/19	Data File:	110529.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-36:2	Client:	Environmental Partners
Date Received:	11/01/19	Project:	74001, F&BI 911011
Date Extracted:	11/04/19	Lab ID:	911011-05 1/6
Date Analyzed:	11/05/19	Data File:	110530.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	83	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-47:0.5	Client:	Environmental Partners
Date Received:	11/01/19	Project:	74001, F&BI 911011
Date Extracted:	11/04/19	Lab ID:	911011-06 1/6
Date Analyzed:	11/05/19	Data File:	110531.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	67	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-48:0.5	Client:	Environmental Partners
Date Received:	11/01/19	Project:	74001, F&BI 911011
Date Extracted:	11/04/19	Lab ID:	911011-07 1/6
Date Analyzed:	11/05/19	Data File:	110532.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-3-B-4:3	Client:	Environmental Partners
Date Received:	11/01/19	Project:	74001, F&BI 911011
Date Extracted:	11/04/19	Lab ID:	911011-08 1/6
Date Analyzed:	11/05/19	Data File:	110533.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-3-B-5:3	Client:	Environmental Partners
Date Received:	11/01/19	Project:	74001, F&BI 911011
Date Extracted:	11/04/19	Lab ID:	911011-09 1/6
Date Analyzed:	11/05/19	Data File:	110534.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-3-SW-9:0.5	Client:	Environmental Partners
Date Received:	11/01/19	Project:	74001, F&BI 911011
Date Extracted:	11/04/19	Lab ID:	911011-10 1/6
Date Analyzed:	11/05/19	Data File:	110535.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	90	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-3-SW-10:1	Client:	Environmental Partners
Date Received:	11/01/19	Project:	74001, F&BI 911011
Date Extracted:	11/04/19	Lab ID:	911011-11 1/6
Date Analyzed:	11/05/19	Data File:	110536.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-3-SW-11:1	Client:	Environmental Partners
Date Received:	11/01/19	Project:	74001, F&BI 911011
Date Extracted:	11/04/19	Lab ID:	911011-12 1/6
Date Analyzed:	11/05/19	Data File:	110537.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.019

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Dup-136	Client:	Environmental Partners
Date Received:	11/01/19	Project:	74001, F&BI 911011
Date Extracted:	11/04/19	Lab ID:	911011-13 1/6
Date Analyzed:	11/05/19	Data File:	110538.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-3-B-6:0.25	Client:	Environmental Partners
Date Received:	11/01/19	Project:	74001, F&BI 911011
Date Extracted:	11/04/19	Lab ID:	911011-14 1/6
Date Analyzed:	11/05/19	Data File:	110539.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	93	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 911011
Date Extracted:	11/04/19	Lab ID:	09-2703 mb 1/6
Date Analyzed:	11/05/19	Data File:	110517.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	94	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/11/19

Date Received: 11/01/19

Project: 74001, F&BI 911011

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 911011-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	83	82	45-130	1

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	99	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

911011

SAMPLE CHAIN OF CUSTODY

ME 11-01-19

Page # 1 of 2 P23

Report To Thom Mason & Charles McFadden

Company EPI

Address 1180 NW Maple St

City, State, ZIP Issaquah, WA

Phone Email tmason@epi-wa.com

SAMPLERS (signature) <u>[Signature]</u>		TURNAROUND TIME
PROJECT NAME <u>74001</u>	PO #	<input checked="" type="checkbox"/> Standard turnaround <input type="checkbox"/> RUSH Rush charges authorized by: <u> </u>
REMARKS	INVOICE TO	SAMPLE DISPOSAL <input type="checkbox"/> Archive samples <input type="checkbox"/> Other Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED								Notes
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Dieldrin (Method 8081)	
AOI-27-B-30:4	01	11/1/19	0835	Soil	2									
AOI-27-B-31:4	02		0840											
AOI-27-B-34:4	03		0845											
AOI-27-B-35:4	04		0850											
AOI-27-B-36:2	05		0905											
AOI-27-SW-47:0.5	06		0855											
AOI-27-SW-48:05	07		0900											
AOI-3-B-4:3	08		1025											
AOI-3-B-5:3	09		1030											
AOI-3-SW-9:0.5	10		1035											

SIGNATURE		PRINT NAME		COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>		Eric Krueger				
Received by: <u>[Signature]</u>		Liz Webb, B		EPI	11/1/19	1222
Relinquished by: <u>[Signature]</u>						
Received by: <u>[Signature]</u>				Samples received at <u>4</u>		00

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

Page # 2 of 2

TURNAROUND TIME

☒ Standard turnaround

☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL





☐ Archive samples

☐ Other _____

Default: Dispose after 30 days

[illegible]

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Eric Krueger	EPI	11/1/19	1222
Received by: 	Eric Krueger	EPI	11/1/19	1222
Relinquished by: 	Eric Krueger	EPI	11/1/19	1222
Received by: 	Eric Krueger	EPI	11/1/19	1222

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

November 12, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 74001, F&BI 911033

Dear Mr Morin:

Included are the results from the testing of material submitted on November 4, 2019 from the 74001, F&BI 911033 project. There are 23 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Charles McFadden
EPI1112R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on November 4, 2019 by Friedman & Bruya, Inc. from the Environmental Partners 74001, F&BI 911033 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
911033 -01	AOI-36-B-10:1.0
911033 -02	AOI-36-SW-15:0.5
911033 -03	AOI-36-SW-16:0.5
911033 -04	AOI-27-B-37:3
911033 -05	AOI-27-SW-49:1.5
911033 -06	AOI-27-SW-50:1.5
911033 -07	AOI-35-B-13:3.5
911033 -08	AOI-35-B-15:2
911033 -09	AOI-35-SW-20:1
911033 -10	AOI-35-SW-21:2.5
911033 -11	AOI-35-SW-22:1
911033 -12	AOI-35-SW-23:1
911033 -13	AOI-DUP-137
911033 -14	AOI-35-SW-24:1
911033 -15	AOI-34-B-7:1
911033 -16	AOI-34-SW-16:0.5
911033 -17	AOI-34-SW-17:0.5
911033 -18	AOI-34-SW-18:0.5
911033 -19	AOI-34-SW-19:0.5

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-B-10:1.0	Client:	Environmental Partners
Date Received:	11/04/19	Project:	74001, F&BI 911033
Date Extracted:	11/05/19	Lab ID:	911033-01 1/6
Date Analyzed:	11/05/19	Data File:	110541.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	94	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-SW-15:0.5	Client:	Environmental Partners
Date Received:	11/04/19	Project:	74001, F&BI 911033
Date Extracted:	11/05/19	Lab ID:	911033-02 1/6
Date Analyzed:	11/05/19	Data File:	110544.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-36-SW-16:0.5	Client:	Environmental Partners
Date Received:	11/04/19	Project:	74001, F&BI 911033
Date Extracted:	11/05/19	Lab ID:	911033-03 1/6
Date Analyzed:	11/05/19	Data File:	110545.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-B-37:3	Client:	Environmental Partners
Date Received:	11/04/19	Project:	74001, F&BI 911033
Date Extracted:	11/05/19	Lab ID:	911033-04 1/6
Date Analyzed:	11/05/19	Data File:	110546.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-49:1.5	Client:	Environmental Partners
Date Received:	11/04/19	Project:	74001, F&BI 911033
Date Extracted:	11/05/19	Lab ID:	911033-05 1/6
Date Analyzed:	11/05/19	Data File:	110547.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	71	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-27-SW-50:1.5	Client:	Environmental Partners
Date Received:	11/04/19	Project:	74001, F&BI 911033
Date Extracted:	11/05/19	Lab ID:	911033-06 1/6
Date Analyzed:	11/05/19	Data File:	110548.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	97	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-13:3.5	Client:	Environmental Partners
Date Received:	11/04/19	Project:	74001, F&BI 911033
Date Extracted:	11/05/19	Lab ID:	911033-07 1/6
Date Analyzed:	11/06/19	Data File:	110549.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-B-15:2	Client:	Environmental Partners
Date Received:	11/04/19	Project:	74001, F&BI 911033
Date Extracted:	11/05/19	Lab ID:	911033-08 1/6
Date Analyzed:	11/06/19	Data File:	110550.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150
DBC	95	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-20:1	Client:	Environmental Partners
Date Received:	11/04/19	Project:	74001, F&BI 911033
Date Extracted:	11/05/19	Lab ID:	911033-09 1/6
Date Analyzed:	11/07/19	Data File:	110705.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	69	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-21:2.5	Client:	Environmental Partners
Date Received:	11/04/19	Project:	74001, F&BI 911033
Date Extracted:	11/05/19	Lab ID:	911033-10 1/6
Date Analyzed:	11/07/19	Data File:	110706.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	50	150
DBC	79	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-22:1	Client:	Environmental Partners
Date Received:	11/04/19	Project:	74001, F&BI 911033
Date Extracted:	11/05/19	Lab ID:	911033-11 1/6
Date Analyzed:	11/07/19	Data File:	110707.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	50	150
DBC	83	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-23:1	Client:	Environmental Partners
Date Received:	11/04/19	Project:	74001, F&BI 911033
Date Extracted:	11/05/19	Lab ID:	911033-12 1/6
Date Analyzed:	11/07/19	Data File:	110708.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150
DBC	81	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-DUP-137	Client:	Environmental Partners
Date Received:	11/04/19	Project:	74001, F&BI 911033
Date Extracted:	11/05/19	Lab ID:	911033-13 1/6
Date Analyzed:	11/07/19	Data File:	110709.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	79	50	150
DBC	86	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-35-SW-24:1	Client:	Environmental Partners
Date Received:	11/04/19	Project:	74001, F&BI 911033
Date Extracted:	11/05/19	Lab ID:	911033-14 1/6
Date Analyzed:	11/07/19	Data File:	110710.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	82	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-B-7:1	Client:	Environmental Partners
Date Received:	11/04/19	Project:	74001, F&BI 911033
Date Extracted:	11/05/19	Lab ID:	911033-15 1/6
Date Analyzed:	11/07/19	Data File:	110711.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	82	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-SW-16:0.5	Client:	Environmental Partners
Date Received:	11/04/19	Project:	74001, F&BI 911033
Date Extracted:	11/05/19	Lab ID:	911033-16 1/6
Date Analyzed:	11/07/19	Data File:	110712.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	84	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-SW-17:0.5	Client:	Environmental Partners
Date Received:	11/04/19	Project:	74001, F&BI 911033
Date Extracted:	11/05/19	Lab ID:	911033-17 1/6
Date Analyzed:	11/07/19	Data File:	110713.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	0.018

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-SW-18:0.5	Client:	Environmental Partners
Date Received:	11/04/19	Project:	74001, F&BI 911033
Date Extracted:	11/05/19	Lab ID:	911033-18 1/6
Date Analyzed:	11/07/19	Data File:	110714.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150
DBC	89	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	AOI-34-SW-19:0.5	Client:	Environmental Partners
Date Received:	11/04/19	Project:	74001, F&BI 911033
Date Extracted:	11/05/19	Lab ID:	911033-19 1/6
Date Analyzed:	11/07/19	Data File:	110715.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 911033
Date Extracted:	11/05/19	Lab ID:	09-2715 mb 1/6
Date Analyzed:	11/05/19	Data File:	110522.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	94	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
Dieldrin	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/12/19

Date Received: 11/04/19

Project: 74001, F&BI 911033

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: 911033-01 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	mg/kg (ppm)	0.1	<0.01	99	95	45-130	4

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dieldrin	mg/kg (ppm)	0.1	93	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

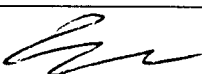
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

911033

SAMPLE CHAIN OF CUSTODY

ME 11-04-19

A05

Report To Thom Morin & Charles McFaddenCompany EPIAddress 1180 NW Maple StCity, State, ZIP Issaquah, WAPhone _____ Email tmorin@epi-wa.comSAMPLERS (signature) 

PROJECT NAME

74001

PO #

REMARKS

INVOICE TO

Project specific RLs? - Yes / No

Page # 1 of 2

TURNAROUND TIME

☒ Standard turnaround☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Archive samples☐ Other _____

Default: Dispose after 30 days

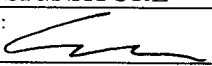
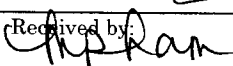
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Dieldrin (detected 8/8/11)			
A01-36-B-10:1.0	01	11/4/19	0800	Soil	1								X			
A01-36-SW-15:0.5	02		0805										X			
A01-36-SW-16:0.5	03		0810										X			
A01-27-B-37:3	04		0825										X			
A01-27-SW-49:1.5	05		0830										X			
A01-27-SW-50:1.5	06		0835										X			
A01-35-B-13:3.5	07		0840										X			
A01-35-B-15:2	08		0845										X			Sample received at 6:00
A01-35-SW-20:1	09		0850										X			
A01-35-SW-21:2.5	10	▽	0855	▽	▽								X			

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

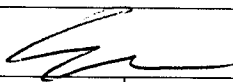
SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Eric Krueser	EPI	11/4/19	1202
Received by: 	My Linh Pham	FBI	11/4/19	12:02
Relinquished by:				
Received by:				

9/11033

SAMPLE CHAIN OF CUSTODY

ME 11-04-19

AOS

Report To Thom Marino's Charles McFaddenCompany EPIAddress 1180 NW Maple StCity, State, ZIP Issaquah, WAPhone _____ Email TMarino@epi-wa.comSAMPLERS (signature) Page # 2 of 2

PROJECT NAME

74001

PO #

REMARKS

INVOICE TO

Project specific RLs? - Yes / No

TURNAROUND TIME

☒ Standard turnaround☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Archive samples☐ Other _____

Default: Dispose after 30 days


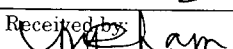
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Dielectric (contaminated 8081)			
AOI-35-SW-22.1	11	11/4/19	0900	Soil	1								X			
AOI-35-SW-23.1	12		0905										X			
DUP-137	13		—										X			
AOI-35-SW-24.1	14		0910										X			
AOI-34-B-7.1	15		0920										X			
AOI-34-SW-16:0.5	16		0925										X			
AOI-34-SW-17:0.5	17		0930										X			
AOI-34-SW-18:0.5	18		0935										X			
AOI-34-SW-19:0.5	19	▽	0940	▽	▽								X			Samples received at 6:00

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Eric Krueser	EPI	11/4/19	1202
Received by: 	Myliah Pham	FBI	11/4/19	12:02
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
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fbi@isomedia.com
www.friedmanandbruya.com

August 6, 2019

Thom Morin, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 74001, F&BI 907507

Dear Mr Morin:

Included are the results from the testing of material submitted on July 26, 2019 from the 74001, F&BI 907507 project. There are 30 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Betsy Wing
EPI0806R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 26, 2019 by Friedman & Bruya, Inc. from the Environmental Partners 74001, F&BI 907507 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
907507-01	Waste-1
907507-02	Waste-2
907507-03	Shed-N:0.5
907507-04	Shed-N-1:0.5
907507-05	Shed-W:0.5
907507-06	Shed-S:0.5
907507-07	Shed-E:0.5

The Waste-1 and Waste-2 samples were not received in 5035 sampling containers. The data were flagged accordingly.

The 8081B calibration standard failed the acceptance criteria for several pesticides. The data were flagged accordingly.

The 8081 toxaphene matrix sample and matrix sample duplicate relative percent difference failed the acceptance criteria. The compound was not detected, therefore the data were acceptable.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/06/19
Date Received: 07/26/19
Project: 74001, F&BI 907507
Date Extracted: 07/29/19
Date Analyzed: 07/29/19

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING METHOD NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u>	<u>Gasoline Range</u>	Surrogate (% Recovery)
Laboratory ID		(Limit 58-139)
Waste-1 pc 907507-01 1/10	230	89
Waste-2 pc 907507-02	6.0	90
Method Blank 09-1811 MB	<5	92

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/06/19
Date Received: 07/26/19
Project: 74001, F&BI 907507
Date Extracted: 07/29/19
Date Analyzed: 07/29/19

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-D_x**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 53-144)
Waste-1 907507-01	36,000	1,700 x	ip
Waste-2 907507-02	12,000 x	41,000	86
Method Blank 09-1822 MB	<50	<250	97

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Waste-1	Client:	Environmental Partners
Date Received:	07/26/19	Project:	74001, F&BI 907507
Date Extracted:	07/29/19	Lab ID:	907507-01 1/250
Date Analyzed:	08/02/19	Data File:	080224.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	154 d	31	163
Benzo(a)anthracene-d12	91 d	24	168

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	<0.5
Chrysene	<0.5
Benzo(a)pyrene	<0.5
Benzo(b)fluoranthene	<0.5
Benzo(k)fluoranthene	<0.5
Indeno(1,2,3-cd)pyrene	<0.5
Dibenz(a,h)anthracene	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Waste-2	Client:	Environmental Partners
Date Received:	07/26/19	Project:	74001, F&BI 907507
Date Extracted:	07/29/19	Lab ID:	907507-02 1/500
Date Analyzed:	07/30/19	Data File:	073030.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	232 d	31	163
Benzo(a)anthracene-d12	140 d	24	168

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	<1
Chrysene	<1
Benzo(a)pyrene	<1
Benzo(b)fluoranthene	<1
Benzo(k)fluoranthene	<1
Indeno(1,2,3-cd)pyrene	<1
Dibenz(a,h)anthracene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 907507
Date Extracted:	07/29/19	Lab ID:	09-1815 mb 1/5
Date Analyzed:	07/30/19	Data File:	073006.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	79	31	163
Benzo(a)anthracene-d12	95	24	168

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Waste-1	Client:	Environmental Partners
Date Received:	07/26/19	Project:	74001, F&BI 907507
Date Extracted:	07/31/19	Lab ID:	907507-01
Date Analyzed:	07/31/19	Data File:	907507-01.132
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Lead	20.1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Waste-2	Client:	Environmental Partners
Date Received:	07/26/19	Project:	74001, F&BI 907507
Date Extracted:	07/31/19	Lab ID:	907507-02
Date Analyzed:	07/31/19	Data File:	907507-02.133
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Lead	24.7
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	NA	Project:	74001, F&BI 907507
Date Extracted:	07/31/19	Lab ID:	I9-462 mb
Date Analyzed:	07/31/19	Data File:	I9-462 mb.102
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Lead	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: Waste-1 pc	Client: Environmental Partners
Date Received: 07/26/19	Project: 74001, F&BI 907507
Date Extracted: 07/29/19	Lab ID: 907507-01
Date Analyzed: 07/29/19	Data File: 072913.D
Matrix: Soil	Instrument: GCMS9
Units: mg/kg (ppm) Dry Weight	Operator: MS/AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	93	107
Toluene-d8	99	87	110
4-Bromofluorobenzene	98	85	112

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<0.5	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: Waste-2 pc	Client: Environmental Partners
Date Received: 07/26/19	Project: 74001, F&BI 907507
Date Extracted: 07/29/19	Lab ID: 907507-02
Date Analyzed: 07/29/19	Data File: 072914.D
Matrix: Soil	Instrument: GCMS9
Units: mg/kg (ppm) Dry Weight	Operator: MS/AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	93	107
Toluene-d8	98	87	110
4-Bromofluorobenzene	96	85	112

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	0.16
Hexane	<0.25	o-Xylene	0.11
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	1,3,5-Trimethylbenzene	0.36
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<0.5	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	0.64
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	0.25
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 907507
Date Extracted:	07/29/19	Lab ID:	09-1700 mb
Date Analyzed:	07/29/19	Data File:	072909.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS/AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	93	107
Toluene-d8	100	87	110
4-Bromofluorobenzene	97	85	112

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<0.5	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Shed-N:0.5	Client:	Environmental Partners
Date Received:	07/26/19	Project:	74001, F&BI 907507
Date Extracted:	07/29/19	Lab ID:	907507-03 1/6
Date Analyzed:	07/30/19	Data File:	073028.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	91	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	0.058
Heptachlor Epoxide	<0.01
trans-Chlordane	0.015
cis-Chlordane	0.021
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.17
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	0.026 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Shed-W:0.5	Client:	Environmental Partners
Date Received:	07/26/19	Project:	74001, F&BI 907507
Date Extracted:	07/29/19	Lab ID:	907507-05 1/6
Date Analyzed:	07/30/19	Data File:	073029.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	88	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.015
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.013
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Shed-S:0.5	Client:	Environmental Partners
Date Received:	07/26/19	Project:	74001, F&BI 907507
Date Extracted:	07/29/19	Lab ID:	907507-06 1/6
Date Analyzed:	07/30/19	Data File:	073030.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	77	50	150
DBC	103	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.034
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.017
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Shed-E:0.5	Client:	Environmental Partners
Date Received:	07/26/19	Project:	74001, F&BI 907507
Date Extracted:	07/29/19	Lab ID:	907507-07 1/6
Date Analyzed:	07/30/19	Data File:	073031.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	50	150
DBC	87	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	0.32
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	0.046
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01 ca
Endrin Aldehyde	<0.01
Methoxychlor	<0.01 ca
Endosulfan Sulfate	<0.01
Endrin Ketone	0.010
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 907507
Date Extracted:	07/29/19	Lab ID:	09-1803 mb 1/6
Date Analyzed:	07/30/19	Data File:	073008.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	93	50	150
DBC	110	50	150

Compounds:	Concentration mg/kg (ppm)
alpha-BHC	<0.01
gamma-BHC (Lindane)	<0.01
beta-BHC	<0.01
delta-BHC	<0.01
Heptachlor	<0.01
Aldrin	<0.01
Heptachlor Epoxide	<0.01
trans-Chlordane	<0.01
cis-Chlordane	<0.01
4,4'-DDE	<0.01
Endosulfan I	<0.01
Dieldrin	<0.01
Endrin	<0.01
4,4'-DDD	<0.01
Endosulfan II	<0.01
4,4'-DDT	<0.01
Endrin Aldehyde	<0.01
Methoxychlor	<0.01
Endosulfan Sulfate	<0.01
Endrin Ketone	<0.01
Toxaphene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Waste-1	Client:	Environmental Partners
Date Received:	07/26/19	Project:	74001, F&BI 907507
Date Extracted:	07/30/19	Lab ID:	907507-01 1/6
Date Analyzed:	07/31/19	Data File:	073041.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	68	31	119

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	<0.02
Aroclor 1262	<0.02
Aroclor 1268	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Waste-2	Client:	Environmental Partners
Date Received:	07/26/19	Project:	74001, F&BI 907507
Date Extracted:	07/30/19	Lab ID:	907507-02 1/6
Date Analyzed:	07/31/19	Data File:	073042.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	31	119

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	<0.02
Aroclor 1262	<0.02
Aroclor 1268	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	74001, F&BI 907507
Date Extracted:	07/30/19	Lab ID:	09-1825 mb 1/6
Date Analyzed:	07/31/19	Data File:	073036.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	96	31	119

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	<0.02
Aroclor 1262	<0.02
Aroclor 1268	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/06/19

Date Received: 07/26/19

Project: 74001, F&BI 907507

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR TPH AS GASOLINE
USING METHOD NWTPH-G_x**

Laboratory Code: 907529-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	20	85	61-153

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/06/19

Date Received: 07/26/19

Project: 74001, F&BI 907507

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-D_x**

Laboratory Code: 907507-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	38,000	194 b	63 b	64-133	102 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	102	58-147

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/06/19

Date Received: 07/26/19

Project: 74001, F&BI 907507

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL
SAMPLES FOR PAHS BY EPA METHOD 8270D SIM**

Laboratory Code: 907454-09 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Benz(a)anthracene	mg/kg (ppm)	0.17	0.018	79	23-144
Chrysene	mg/kg (ppm)	0.17	0.024	74	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.024	74	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.010	76	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.022	75	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.017	79	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	83	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benz(a)anthracene	mg/kg (ppm)	0.17	90	93	51-115	3
Chrysene	mg/kg (ppm)	0.17	91	93	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	81	88	56-123	8
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	86	86	54-131	0
Benzo(a)pyrene	mg/kg (ppm)	0.17	82	84	51-118	2
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	94	98	49-148	4
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	100	101	50-141	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/06/19

Date Received: 07/26/19

Project: 74001, F&BI 907507

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 907401-01 x5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	mg/kg (ppm)	50	<5	101	101	75-125	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	mg/kg (ppm)	50	102	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/06/19

Date Received: 07/26/19

Project: 74001, F&BI 907507

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 907493-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	16	18	10-56	12
Chloromethane	mg/kg (ppm)	2.5	<0.5	43	50	10-90	15
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	43	49	10-91	13
Bromomethane	mg/kg (ppm)	2.5	<0.5	69	76	10-110	10
Chloroethane	mg/kg (ppm)	2.5	<0.5	64	71	10-101	10
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	57	65	10-95	13
Acetone	mg/kg (ppm)	12.5	<0.5	109	109	11-141	0
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	72	80	22-107	11
Hexane	mg/kg (ppm)	2.5	<0.25	42	48	10-95	13
Methylene chloride	mg/kg (ppm)	2.5	<0.5	79	75	14-128	5
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	75	82	17-134	9
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	73	80	13-112	9
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	75	82	23-115	9
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	81	88	18-117	8
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	78	84	25-120	7
Chloroform	mg/kg (ppm)	2.5	<0.05	83	91	29-117	9
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	89	85	20-133	5
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	81	86	22-124	6
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	83	90	27-112	8
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	77	83	26-107	7
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	88	92	28-126	4
Benzene	mg/kg (ppm)	2.5	<0.03	77	81	26-114	5
Trichloroethene	mg/kg (ppm)	2.5	<0.02	80	85	30-112	6
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	81	84	31-119	4
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	93	95	31-131	2
Dibromomethane	mg/kg (ppm)	2.5	<0.05	88	89	27-124	1
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	91	93	16-147	2
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	91	92	28-137	1
Toluene	mg/kg (ppm)	2.5	<0.05	84	89	34-112	6
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	95	96	30-136	1
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	85	88	32-126	3
2-Hexanone	mg/kg (ppm)	12.5	<0.5	90	86	17-147	5
1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	85	89	29-125	5
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	83	89	25-114	7
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	109	107	32-143	2
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	88	91	32-126	3
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	85	90	37-113	6
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	86	90	34-115	5
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	102	105	35-126	3
m,p-Xylene	mg/kg (ppm)	5	<0.1	89	94	25-125	5
o-Xylene	mg/kg (ppm)	2.5	<0.05	87	93	27-126	7
Styrene	mg/kg (ppm)	2.5	<0.05	88	93	39-121	6
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	89	95	34-123	7
Bromoform	mg/kg (ppm)	2.5	<0.05	108	102	18-155	6
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	89	93	31-120	4
Bromobenzene	mg/kg (ppm)	2.5	<0.05	88	91	40-115	3
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	91	95	24-130	4
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	92	96	27-148	4
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	87	90	33-123	3
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	87	92	39-110	6
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	88	90	39-111	2
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	92	96	36-116	4
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	89	94	35-116	5
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	90	96	33-118	6
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	92	97	32-119	5
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	90	94	38-111	4
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	87	89	39-109	2
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	89	95	40-111	7
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	95	101	44-112	6
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	87	96	31-121	10
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	89	96	24-128	8
Naphthalene	mg/kg (ppm)	2.5	<0.05	84	93	24-139	10
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	87	96	35-117	10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/06/19

Date Received: 07/26/19

Project: 74001, F&BI 907507

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	37	10-76
Chloromethane	mg/kg (ppm)	2.5	68	34-98
Vinyl chloride	mg/kg (ppm)	2.5	74	42-107
Bromomethane	mg/kg (ppm)	2.5	94	46-113
Chloroethane	mg/kg (ppm)	2.5	92	47-115
Trichlorofluoromethane	mg/kg (ppm)	2.5	95	53-112
Acetone	mg/kg (ppm)	12.5	121	39-147
1,1-Dichloroethene	mg/kg (ppm)	2.5	103	65-110
Hexane	mg/kg (ppm)	2.5	80	55-107
Methylene chloride	mg/kg (ppm)	2.5	89	50-127
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	93	72-122
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	99	71-113
1,1-Dichloroethane	mg/kg (ppm)	2.5	96	74-109
2,2-Dichloropropane	mg/kg (ppm)	2.5	102	63-145
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	95	73-110
Chloroform	mg/kg (ppm)	2.5	102	76-110
2-Butanone (MEK)	mg/kg (ppm)	12.5	100	60-121
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	97	73-111
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	104	72-116
1,1-Dichloropropene	mg/kg (ppm)	2.5	98	72-112
Carbon tetrachloride	mg/kg (ppm)	2.5	110	67-123
Benzene	mg/kg (ppm)	2.5	95	72-106
Trichloroethene	mg/kg (ppm)	2.5	97	72-107
1,2-Dichloropropane	mg/kg (ppm)	2.5	97	74-115
Bromodichloromethane	mg/kg (ppm)	2.5	109	75-126
Dibromomethane	mg/kg (ppm)	2.5	104	76-116
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	106	80-128
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	106	71-138
Toluene	mg/kg (ppm)	2.5	100	74-111
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	111	73-124
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	99	76-118
2-Hexanone	mg/kg (ppm)	12.5	101	67-123
1,3-Dichloropropane	mg/kg (ppm)	2.5	102	75-118
Tetrachloroethene	mg/kg (ppm)	2.5	100	73-111
Dibromochloromethane	mg/kg (ppm)	2.5	125	64-152
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	104	77-117
Chlorobenzene	mg/kg (ppm)	2.5	101	76-109
Ethylbenzene	mg/kg (ppm)	2.5	100	75-112
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	117	75-129
m,p-Xylene	mg/kg (ppm)	5	103	77-115
o-Xylene	mg/kg (ppm)	2.5	101	76-115
Styrene	mg/kg (ppm)	2.5	102	76-119
Isopropylbenzene	mg/kg (ppm)	2.5	103	76-120
Bromoform	mg/kg (ppm)	2.5	121	50-174
n-Propylbenzene	mg/kg (ppm)	2.5	102	77-115
Bromobenzene	mg/kg (ppm)	2.5	101	76-112
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	105	77-121
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	107	74-121
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	100	73-117
2-Chlorotoluene	mg/kg (ppm)	2.5	101	75-113
4-Chlorotoluene	mg/kg (ppm)	2.5	101	77-115
tert-Butylbenzene	mg/kg (ppm)	2.5	105	77-123
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	103	77-119
sec-Butylbenzene	mg/kg (ppm)	2.5	104	78-120
p-Isopropyltoluene	mg/kg (ppm)	2.5	105	77-120
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	104	76-112
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	97	74-109
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	104	75-114
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	113	68-122
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	103	75-122
Hexachlorobutadiene	mg/kg (ppm)	2.5	101	74-130
Naphthalene	mg/kg (ppm)	2.5	102	73-122
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	103	75-117

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/06/19

Date Received: 07/26/19

Project: 74001, F&BI 907507

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR ORGANOCHLORINE PESTICIDES BY EPA METHOD 8081B

Laboratory Code: 907493-04 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
alpha-BHC	mg/kg (ppm)	0.1	<0.01	65	61	45-111	6
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	<0.01	71	67	50-117	6
beta-BHC	mg/kg (ppm)	0.1	<0.01	75	69	49-109	8
delta-BHC	mg/kg (ppm)	0.1	<0.01	73	69	39-114	6
Heptachlor	mg/kg (ppm)	0.1	<0.01	74	68	40-131	8
Aldrin	mg/kg (ppm)	0.1	<0.01	75	69	44-121	8
Heptachlor Epoxide	mg/kg (ppm)	0.1	<0.01	75	69	46-122	8
trans-Chlordane	mg/kg (ppm)	0.1	<0.01	75	68	41-129	10
cis-Chlordane	mg/kg (ppm)	0.1	<0.01	77	70	44-120	10
4,4'-DDE	mg/kg (ppm)	0.1	<0.01	76	70	50-150	8
Endosulfan I	mg/kg (ppm)	0.1	<0.01	74	66	45-124	11
Dieldrin	mg/kg (ppm)	0.1	<0.01	75	68	45-130	10
Endrin	mg/kg (ppm)	0.1	<0.01	87	80	50-140	8
4,4'-DDD	mg/kg (ppm)	0.1	<0.01	82	75	26-155	9
Endosulfan II	mg/kg (ppm)	0.1	<0.01	69	63	40-135	9
4,4'-DDT	mg/kg (ppm)	0.1	<0.01	75	68	50-150	10
Endrin Aldehyde	mg/kg (ppm)	0.1	<0.01	77	69	35-139	11
Methoxychlor	mg/kg (ppm)	0.1	<0.01	91	77	28-162	17
Endosulfan Sulfate	mg/kg (ppm)	0.1	<0.01	75	68	40-141	10
Endrin Ketone	mg/kg (ppm)	0.1	<0.01	79	72	41-147	9
Toxaphene	mg/kg (ppm)	4	<1	107	85	50-150	23 vo

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/06/19

Date Received: 07/26/19

Project: 74001, F&BI 907507

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
alpha-BHC	mg/kg (ppm)	0.1	91	56-113
gamma-BHC (Lindane)	mg/kg (ppm)	0.1	93	58-120
beta-BHC	mg/kg (ppm)	0.1	95	70-130
delta-BHC	mg/kg (ppm)	0.1	98	70-130
Heptachlor	mg/kg (ppm)	0.1	92	56-124
Aldrin	mg/kg (ppm)	0.1	99	70-130
Heptachlor Epoxide	mg/kg (ppm)	0.1	95	70-130
trans-Chlordane	mg/kg (ppm)	0.1	94	60-123
cis-Chlordane	mg/kg (ppm)	0.1	98	70-130
4,4'-DDE	mg/kg (ppm)	0.1	97	70-130
Endosulfan I	mg/kg (ppm)	0.1	95	62-124
Dieldrin	mg/kg (ppm)	0.1	95	70-130
Endrin	mg/kg (ppm)	0.1	111	56-147
4,4'-DDD	mg/kg (ppm)	0.1	103	54-137
Endosulfan II	mg/kg (ppm)	0.1	88	42-140
4,4'-DDT	mg/kg (ppm)	0.1	95	25-169
Endrin Aldehyde	mg/kg (ppm)	0.1	98	21-135
Methoxychlor	mg/kg (ppm)	0.1	104	54-154
Endosulfan Sulfate	mg/kg (ppm)	0.1	95	39-148
Endrin Ketone	mg/kg (ppm)	0.1	100	46-134
Toxaphene	mg/kg (ppm)	4	122	56-145

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/06/19

Date Received: 07/26/19

Project: 74001, F&BI 907507

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
POLYCHLORINATED BIPHENYLS AS
AROCOR 1016/1260 BY EPA METHOD 8082A**

Laboratory Code: 907529-05 1/6 (Matrix Spike) 1/6

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Control Limits
Aroclor 1016	mg/kg (ppm)	0.25	<0.02	85	50-150
Aroclor 1260	mg/kg (ppm)	0.25	<0.02	83	50-150

Laboratory Code: Laboratory Control Sample 1/6

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.25	99	101	47-158	2
Aroclor 1260	mg/kg (ppm)	0.25	103	100	69-147	3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Attachment H
Monitoring Well Construction Logs



SITE ADDRESS

1802 Brookdale Rd E, Tacoma, WA

CLIENT:

Ichijo USA

CASING MATERIAL AND SIZE:

2" Sch. 40 PVC

DRILLING CONTRACTOR:

Holocene Drilling

PROJECT #:

15397

SCREEN SIZE:

0.010" Slot

DRILLING EQUIPMENT:

Limited-Access Rig

DATE:

2/13/20

SCREEN INTERVAL:

10'-20' bgs

DRILLING METHOD:

Hollow-Stem Auger (HSA)

GROUND SURFACE ELEV. FT AMSL:

Not Measured

FILTER PACK:

Silica Sand

LOGGED BY:

C. McFadden

BOREHOLE SIZE:

6" Diameter

TOTAL DEPTH:

20' bgs

FILTER PACK INTERVAL:

8'-20' bgs

Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)	Well Construction
0		WELL-GRADED GRAVEL WITH SAND; brown; damp; mostly fine to coarse gravel with minor sand					Well Monument Set in Cement
1							
2							
3							Hydrated Bentonite Chips
4							
5						0.0	
6			33	16,50/6			Well Casing
7							
8							
9							Filter Pack
10	GW					0.0	
11			66	22,29,50/6			Well Screen
12							
13							
14							
15		15' Wet; rusting; addition of few silt				0.0	
16			66	32,24,35			
17							
18							
19							
20		20' NO RECOVERY; wet					
		End of Borehole					
21			0	50/3			
22							

NOTES: DTW = 12.84' bgs with stick-up monument.

**BORING ID: MW-2**

SITE ADDRESS 1802 Brookdale Road East, Tacoma, WA		CLIENT: Ichijo USA Co., Ltd.	CASING MATERIAL AND SIZE: 2" SCH 40 PVC
DRILLING CONTRACTOR: Holocene Drilling		PROJECT #: 430733	SCREEN SIZE: 0.010" Slot
DRILLING EQUIPMENT: D-50 Track Mounted Rig		DATE: 3/8/2021	SCREEN INTERVAL: 10'-20' bgs
DRILLING METHOD: Hollow-Stem Auger		GROUND SURFACE ELEV. FT AMSL: Not Measured	FILTER PACK: Silica Sand
LOGGED BY: R. O'Dell	BOREHOLE SIZE: 4" diameter	TOTAL DEPTH: 20	FILTER PACK INTERVAL: 8'-20' bgs

Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)	Well Construction
0		SANDY SILT; dark brown; moist; stiff; mostly sandy silt with minor gravel.					4' above ground stickup well
2							
4		5': Damp; strong odor.				3.2	Hydrated bentonite chips
6			10	3,4,6			Strong odor
8							
10	ML	10': Few gravel.	5	3,6,7		2.9	Silica Sand Filter Pack
12							0.010-inch slotted screen
14							
16		15': Wet; grasses and fine sticks present.	100	31,50/5		3.1	
18						2.3	Silica sand filter pack
20		19.5': Increase in gravel content.				0.1	
	SW-SM	WELL-GRADED SAND WITH SILT AND GRAVEL; brown; lmoist; dense; medium plasticity; mostly fine to coarse sand with minor gravel and silt	100	16,36,36		0.8	End Cap
22		End of Bore Hole					Holocene Backfilled the last 1.5' with native soil

NOTES: Well Tag ID: BMR 877. DTW= 15.88' below top of PVC (measured).



BORING ID: MW-3

SITE ADDRESS

1802 Brookdale Road East, Tacoma, WA

CLIENT:

Ichijo USA Co., Ltd.

CASING MATERIAL AND SIZE:

2" SCH 40 PVC

DRILLING CONTRACTOR:

Holocene Drilling

PROJECT #:

430733

SCREEN SIZE:

0.010" Slot

DRILLING EQUIPMENT:

D-120 Truck Rig

DATE:

3/9/2021

SCREEN INTERVAL:

10'-20' bgs

DRILLING METHOD:

Hollow-Stem Auger

GROUND SURFACE ELEV. FT AMSL:

Not Measured

FILTER PACK:

Silica Sand

LOGGED BY:

R. O'Dell

BOREHOLE SIZE:

4" diameter

TOTAL DEPTH:

20

FILTER PACK INTERVAL:

8'-20' bgs

Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)	Well Construction
0		WELL-GRADED SAND WITH GRAVEL; brown; dry; hard; medium plasticity; mostly sand with some gravel and trace silt					4' above ground stickup well
2							
4							Hydrated bentonite chips
6			25	14,24,36		0.1	Strong odor
8							
10	SW		20	16,22,36		0.4	Silica Sand Filter Pack 0.010-inch slotted screen
12							
14							
16			0	50 / 6	No Recovery		Silica sand filter pack
18							
20	SP-SM	POORLY-GRADED SAND WITH SILT; reddish gray; damp; hard; mostly fine sand and minor silt	50	50 / 6		0.3	
22		End of Bore Hole				0.2	End Cap Holocene Backfilled the last 1.5' with native soil

NOTES: Well Tag ID: BMR 878. DTW= 16.45' below top of PVC (measured).



BORING ID: MW-4

SITE ADDRESS

1802 Brookdale Road East, Tacoma, WA

CLIENT:

Ichijo USA Co., Ltd.

CASING MATERIAL AND SIZE:

2" SCH 40 PVC

DRILLING CONTRACTOR:

Holocene Drilling

PROJECT #:

430733

SCREEN SIZE:

0.010" Slot

DRILLING EQUIPMENT:

D-120 Truck Rig

DATE:

3/9/2021

SCREEN INTERVAL:

10'-20' bgs

DRILLING METHOD:

Hollow-Stem Auger

GROUND SURFACE ELEV. FT AMSL:

Not Measured

FILTER PACK:

Silica Sand

LOGGED BY:

R. O'Dell

BOREHOLE SIZE:

4" diameter

TOTAL DEPTH:

20

FILTER PACK INTERVAL:

8'-20' bgs

Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)	Well Construction
0		WELL-GRADED SAND WITH GRAVEL; brown; damp; dense; mostly fine to coarse sand with some gravel; trace silt					
2							
4							
5	SW	5' Continued				0.7	4' above ground stickup well
6			20	16,28,30			Hydrated bentonite chips
8							Strong odor
10		WELL-GRADED GRAVEL; brown; moist; very dense; mostly gravel with few sand	5	50 / 5		1.1	Silica Sand Filter Pack
12							0.010-inch slotted screen
14							
15		15' - color change to reddish yellow; wet; medium dense				0.8	
16	GW		40	16,19,23			Silica sand filter pack
18							
20		20' - continued; dense; increase in fine sand content from few sand to minor sand.	60	16,30,42		1.7	
22		End of Bore Hole					End Cap Holocene Backfilled the last 1.5' with native soil

NOTES: Well Tag ID: BMR 881. DTW= 13.67' below top of PVC (measured).

**BORING ID: MW-5****SITE ADDRESS****1802 Brookdale Road East, Tacoma, WA****CLIENT:****Ichijo USA Co., Ltd.****CASING MATERIAL AND SIZE:****2" SCH 40 PVC****DRILLING CONTRACTOR:****Holocene Drilling****PROJECT #:****430733****SCREEN SIZE:****0.010" Slot****DRILLING EQUIPMENT:****D-120 Truck Rig****DATE:****3/9/2021****SCREEN INTERVAL:****10'-20' bgs****DRILLING METHOD:****Hollow-Stem Auger****GROUND SURFACE ELEV. FT AMSL:****Not Measured****FILTER PACK:****Silica Sand****LOGGED BY:****R. O'Dell****BOREHOLE SIZE:****4" diameter****TOTAL DEPTH:****20****FILTER PACK INTERVAL:****8'-20' bgs**

Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)	Well Construction
0		WELL-GRADED SAND WITH GRAVEL; brown; dry; hard; medium plasticity; mostly fine to coarse sand with some gravel and trace silt					4' above ground stickup well
2							
4							Hydrated bentonite chips
6			10	27, 50 / 4		0.8	Strong odor
8	SW						
10		At 11': color change to reddish yellow; moist	50	20,26,33		0.6	Silica Sand Filter Pack
12							0.010-inch slotted screen
14							14 ▼
16		WELL-GRADED GRAVEL; reddish yellow; wet; medium dense; mostly gravel with minor sand	10	20,11,11		0.5	Silica sand filter pack
18	GW						
20	SP	POORLY-GRADED SAND; brown; wet; dense; mostly coarse sand with few silt				0.2	
	GW	WELL-GRADED GRAVEL; brown; wet; dense; mostly gravel with minor sand	100	8,16,32			
22		End of Bore Hole					End Cap Holocene Backfilled the last 1.5' with native soil

NOTES: Well Tag ID: BMR 879. DTW= 16.52' below top of PVC (measured).

Attachment I
2021 Groundwater Laboratory Analytical Results

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

March 25, 2021

Nate Hinsperger, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 430733 Ichijo Brookdale, F&BI 103332

Dear Mr Hinsperger:

Included are the results from the testing of material submitted on March 17, 2021 from the 430733 Ichijo Brookdale, F&BI 103332 project. There are 9 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
TRC0325R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on March 17, 2020 by Friedman & Bruya, Inc. from the TRC Environmental 430733 Ichijo Brookdale, F&BI 103332 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>TRC Environmental</u>
103332 -01	MW-1
103332 -02	MW-2
103332 -03	MW-3
103332 -04	MW-4
103332 -05	MW-5

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	MW-1	Client:	TRC Environmental
Date Received:	03/17/21	Project:	430733 Ichijo Brookdale, F&BI 103332
Date Extracted:	03/23/21	Lab ID:	103332-01
Date Analyzed:	03/23/21	Data File:	032309.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	88	20	121
DBC	91	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	MW-2	Client:	TRC Environmental
Date Received:	03/17/21	Project:	430733 Ichijo Brookdale, F&BI 103332
Date Extracted:	03/23/21	Lab ID:	103332-02
Date Analyzed:	03/23/21	Data File:	032310.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	62	20	121
DBC	76	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	MW-3	Client:	TRC Environmental
Date Received:	03/17/21	Project:	430733 Ichijo Brookdale, F&BI 103332
Date Extracted:	03/23/21	Lab ID:	103332-03
Date Analyzed:	03/23/21	Data File:	032311.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	85	20	121
DBC	88	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	MW-4	Client:	TRC Environmental
Date Received:	03/17/21	Project:	430733 Ichijo Brookdale, F&BI 103332
Date Extracted:	03/23/21	Lab ID:	103332-04
Date Analyzed:	03/23/21	Data File:	032312.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	20	121
DBC	88	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	MW-5	Client:	TRC Environmental
Date Received:	03/17/21	Project:	430733 Ichijo Brookdale, F&BI 103332
Date Extracted:	03/23/21	Lab ID:	103332-05
Date Analyzed:	03/23/21	Data File:	032313.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	78	20	121
DBC	84	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	430733 Ichijo Brookdale, F&BI 103332
Date Extracted:	03/23/21	Lab ID:	01-712 mb
Date Analyzed:	03/23/21	Data File:	032308.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	73	20	121
DBC	91	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/25/21

Date Received: 03/17/21

Project: 430733 Ichijo Brookdale, F&BI 103332

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	ug/L (ppb)	0.25	88	91	52-112	3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Doc # 837

Default: Dispose after 30 days

ANALYSES REQUESTED

Samples received at 4 00

Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

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Seattle, WA 98119-2029
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fbi@isomedia.com
www.friedmanandbruya.com

June 9, 2021

Nate Hinsperger, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 430733 Ichijo Brookdale, F&BI 106031

Dear Mr Hinsperger:

Included are the results from the testing of material submitted on June 2, 2021 from the 430733 Ichijo Brookdale, F&BI 106031 project. There are 9 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
TRC0609R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 2, 2020 by Friedman & Bruya, Inc. from the TRC Environmental 430733 Ichijo Brookdale, F&BI 106031 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>TRC Environmental</u>
106031 -01	MW-1
106031 -02	MW-2
106031 -03	MW-3
106031 -04	MW-4
106031 -05	MW-5

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	MW-1	Client:	TRC Environmental
Date Received:	06/02/21	Project:	430733 Ichijo Brookdale, F&BI 106031
Date Extracted:	06/03/21	Lab ID:	106031-01
Date Analyzed:	06/03/21	Data File:	060319.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	57	20	121
DBC	86	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	MW-2	Client:	TRC Environmental
Date Received:	06/02/21	Project:	430733 Ichijo Brookdale, F&BI 106031
Date Extracted:	06/03/21	Lab ID:	106031-02
Date Analyzed:	06/03/21	Data File:	060320.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	20	121
DBC	77	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	MW-3	Client:	TRC Environmental
Date Received:	06/02/21	Project:	430733 Ichijo Brookdale, F&BI 106031
Date Extracted:	06/03/21	Lab ID:	106031-03
Date Analyzed:	06/03/21	Data File:	060321.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	20	121
DBC	87	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	MW-4	Client:	TRC Environmental
Date Received:	06/02/21	Project:	430733 Ichijo Brookdale, F&BI 106031
Date Extracted:	06/03/21	Lab ID:	106031-04
Date Analyzed:	06/03/21	Data File:	060322.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	63	20	121
DBC	94	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	MW-5	Client:	TRC Environmental
Date Received:	06/02/21	Project:	430733 Ichijo Brookdale, F&BI 106031
Date Extracted:	06/03/21	Lab ID:	106031-05
Date Analyzed:	06/03/21	Data File:	060323.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	49	20	121
DBC	86	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	430733 Ichijo Brookdale, F&BI 106031
Date Extracted:	06/03/21	Lab ID:	01-1353 mb
Date Analyzed:	06/03/21	Data File:	060318.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	46	20	121
DBC	86	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/09/21

Date Received: 06/02/21

Project: 430733 Ichijo Brookdale, F&BI 106031

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	ug/L (ppb)	0.25	88	94	52-112	7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

71
-C
W

of _____

TURNAROUND TIME

☐ Standard turnaround
☐ RUSH_____

Rush charges authorized by:

INVOICE TO

Default: Dispose after 30 days

[illegible]

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

October 11, 2021

Thom Morin, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 430733 Ichijo Brookdale, F&BI 109568

Dear Mr Morin:

Included are the results from the testing of material submitted on September 30, 2021 from the 430733 Ichijo Brookdale, F&BI 109568 project. There are 9 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Cynthia Moon, Nate Dorfner
TRC1011R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 30, 2021 by Friedman & Bruya, Inc. from the TRC Environmental 430733 Ichijo Brookdale, F&BI 109568 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>TRC Environmental</u>
109568-01	MW-1
109568-02	MW-5
109568-03	MW-3
109568-04	MW-2
109568-05	MW-4

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	MW-1	Client:	TRC Environmental
Date Received:	09/30/21	Project:	430733 Ichijo Brookdale, F&BI 109568
Date Extracted:	10/06/21	Lab ID:	109568-01
Date Analyzed:	10/06/21	Data File:	100609.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	20	121
DBC	102	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	MW-5	Client:	TRC Environmental
Date Received:	09/30/21	Project:	430733 Ichijo Brookdale, F&BI 109568
Date Extracted:	10/06/21	Lab ID:	109568-02
Date Analyzed:	10/06/21	Data File:	100610.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	20	121
DBC	106	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	MW-3	Client:	TRC Environmental
Date Received:	09/30/21	Project:	430733 Ichijo Brookdale, F&BI 109568
Date Extracted:	10/06/21	Lab ID:	109568-03
Date Analyzed:	10/06/21	Data File:	100611.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	50	20	121
DBC	82	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	MW-2	Client:	TRC Environmental
Date Received:	09/30/21	Project:	430733 Ichijo Brookdale, F&BI 109568
Date Extracted:	10/06/21	Lab ID:	109568-04
Date Analyzed:	10/06/21	Data File:	100612.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60	20	121
DBC	93	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	MW-4	Client:	TRC Environmental
Date Received:	09/30/21	Project:	430733 Ichijo Brookdale, F&BI 109568
Date Extracted:	10/06/21	Lab ID:	109568-05
Date Analyzed:	10/06/21	Data File:	100613.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	66	20	121
DBC	104	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Organochlorine Pesticides By EPA Method 8081B

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	430733 Ichijo Brookdale, F&BI 109568
Date Extracted:	10/06/21	Lab ID:	01-2281 mb
Date Analyzed:	10/06/21	Data File:	100607.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	74	20	121
DBC	105	18	174

Compounds:	Concentration ug/L (ppb)
Dieldrin	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/11/21

Date Received: 09/30/21

Project: 430733 Ichijo Brookdale, F&BI 109568

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES FOR
ORGANOCHLORINE PESTICIDES
BY EPA METHOD 8081B**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dieldrin	ug/L (ppb)	0.25	89	93	52-112	4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

ME 09/29/21 E04

Page # _____ of _____
TURNAROUND TIME

☒ Standard turnaround
☐ RUSH _____
Rush charges authorized by: _____

☒ Standard turnaround

SAMPLE DISPOSAL
☐ Archive samples
☐ Other _____
 Default: Dispose after 30

Default: Dispose after 30 days

[illegible]

Attachment J
Soil Disposal Documentation

PCRCD, LLC DBA LRI-304TH ST
17925 Meridian St E
Puyallup, WA 98375
(253) 847-7555

INVOICE

Date due 08/01/19

DATE	PAGE
06/30/19	1
INVOICE NUMBER	
8090	

AMOUNT DUE	AMOUNT PAID
569066.24	\$

ICHIJO USA CO., LTD.
YOSHIKO/TINA
1406 140TH PL NE STE 104
BELLEVUE WA 98007

Code: 160 - 0 - 01

Approved by: Kanm



Date: / /

\$31,061 Total

ACCOUNT NO.

920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
06/11/19	03-00572190		46	SPECIAL WASTE-OUT CO	25.44	790.68
06/11/19	03-00572199		10	SPECIAL WASTE-OUT CO	25.12	780.73
06/11/19	03-00572211		R9	SPECIAL WASTE-OUT CO	24.14	750.27
06/11/19	03-00572212		R8	SPECIAL WASTE-OUT CO	28.52	886.40
06/11/19	03-00572214		30	SPECIAL WASTE-OUT CO	30.43	945.76
06/11/19	03-00572218		45	SPECIAL WASTE-OUT CO	30.71	954.47
06/11/19	03-00572249		46	SPECIAL WASTE-OUT CO	30.60	951.05
06/11/19	03-00572252		10	SPECIAL WASTE-OUT CO	25.56	794.40
06/11/19	03-00572257		8	SPECIAL WASTE-OUT CO	27.43	852.52
06/11/19	03-00572258		9	SPECIAL WASTE-OUT CO	24.70	767.68
06/11/19	03-00572264		OLSON 45	SPECIAL WASTE-OUT CO	25.91	805.28
06/11/19	03-00572295		46	SPECIAL WASTE-IN CO	27.33	4653.10
06/11/19	03-00572299		10	SPECIAL WASTE-OUT CO	28.79	894.79
06/11/19	03-00572302		8	SPECIAL WASTE-OUT CO	31.14	967.83
06/11/19	03-00572304		9	SPECIAL WASTE-OUT CO	27.36	850.35
06/11/19	03-00572311		30	SPECIAL WASTE-OUT CO	30.96	962.24
06/11/19	03-00572319		45	SPECIAL WASTE-OUT CO	29.43	914.68
06/11/19	03-00572338		46	SPECIAL WASTE-OUT CO	29.16	906.29
06/11/19	03-00572343		10	SPECIAL WASTE-OUT CO	24.93	774.82
06/11/19	03-00572348		8	SPECIAL WASTE-OUT CO	32.86	1021.29
06/11/19	03-00572349		9	SPECIAL WASTE-OUT CO	28.51	886.09
06/11/19	03-00572354		30	SPECIAL WASTE-OUT CO	33.42	1038.69
06/11/19	03-00572359		45	SPECIAL WASTE-OUT CO	30.29	941.41
06/11/19	03-00572374		46	SPECIAL WASTE-OUT CO	31.20	969.70
06/11/19	03-00572380		8	SPECIAL WASTE-OUT CO	30.72	954.78
06/11/19	03-00572385		30	SPECIAL WASTE-OUT CO	26.49	823.31
06/11/19	03-00572389		45	SPECIAL WASTE-OUT CO	28.47	884.85
06/11/19	03-00572390		9	SPECIAL WASTE-OUT CO	22.10	686.87
06/11/19	03-00572398		46	SPECIAL WASTE-OUT CO	27.26	847.24
06/12/19	03-00572414	ICH7	7	SPECIAL WASTE-OUT CO	27.01	839.47

30

6/11=29 ✓

PCRCO, LLC DBA LRI-304TH ST
17925 Meridian St E
Puyallup, WA 98375
(253) 847-7555

INVOICE

Date due 08/01/19

DATE	PAGE
06/30/19	2
INVOICE NUMBER	
8090	

AMOUNT DUE	AMOUNT PAID
569066.24	\$

ICHIJO USA CO., LTD.
YOSHIKO/TINA
1406 140TH PL NE STE 104
BELLEVUE WA 98007

ACCOUNT NO.

920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
06/12/19	03-00572415	ICH34	34	SPECIAL WASTE-OUT CO	28.17	875.52
06/12/19	03-00572416	ICH10	10	SPECIAL WASTE-OUT CO	22.45	697.75
06/12/19	03-00572421	ICH9	9	SPECIAL WASTE-OUT CO	25.69	798.45
06/12/19	03-00572424	ICH8	8	SPECIAL WASTE-OUT CO	26.89	835.74
06/12/19	03-00572436	ICH46	46	SPECIAL WASTE-OUT CO	27.59	857.50
06/12/19	03-00572446	ICH45	45	SPECIAL WASTE-OUT CO	26.73	830.77
06/12/19	03-00572480	ICH7	7	SPECIAL WASTE-OUT CO	30.52	948.56
06/12/19	03-00572486	ICH34	34	SPECIAL WASTE-OUT CO	28.37	881.74
06/12/19	03-00572487	ICH10	10	SPECIAL WASTE-OUT CO	27.59	857.50
06/12/19	03-00572489	ICH9	9	SPECIAL WASTE-OUT CO	27.95	868.69
06/12/19	03-00572491	ICH8	8	SPECIAL WASTE-OUT CO	29.52	917.48
06/12/19	03-00572493	ICH46	46	SPECIAL WASTE-OUT CO	27.86	865.89
06/12/19	03-00572499	ICH45	45	SPECIAL WASTE-OUT CO	26.33	818.34
06/12/19	03-00572522	ICH7	7	SPECIAL WASTE-OUT CO	29.89	928.98
06/12/19	03-00572526		BARNES 34	SPECIAL WASTE-OUT CO	34.09	1059.52
06/12/19	03-00572538	ICH10	REED 10	SPECIAL WASTE-OUT CO	27.27	847.55
06/12/19	03-00572539	ICH9	9	SPECIAL WASTE-OUT CO	26.10	811.19
06/12/19	03-00572544	ICH8	8	SPECIAL WASTE-OUT CO	29.04	902.56
06/12/19	03-00572548		OLSON 46	SPECIAL WASTE-OUT CO	27.67	859.98
06/12/19	03-00572552	ICH45	45	SPECIAL WASTE-OUT CO	26.76	831.70
06/12/19	03-00572582	ICH7	REED 007	SPECIAL WASTE-OUT CO	31.07	965.66
06/12/19	03-00572586		34	SPECIAL WASTE-OUT CO	29.77	925.25
06/12/19	03-00572587	ICH10	REED 10	SPECIAL WASTE-OUT CO	25.35	787.88
06/12/19	03-00572589	ICH9	9	SPECIAL WASTE-OUT CO	24.42	758.97
06/12/19	03-00572592	ICH8	8	SPECIAL WASTE-OUT CO	25.02	777.62
06/12/19	03-00572594	ICH46	46	SPECIAL WASTE-OUT CO	25.11	780.42
06/12/19	03-00572597		OLSON 45	SPECIAL WASTE-OUT CO	26.80	832.94
06/12/19	03-00572600		OLSON 30	SPECIAL WASTE-OUT CO	27.28	847.86
06/12/19	03-00572625	ICH7	7	SPECIAL WASTE-OUT CO	29.48	916.24
06/12/19	03-00572631	ICH10	10	SPECIAL WASTE-OUT CO	23.65	735.04

30

PCRCD, LLC DBA LRI-304TH ST
17925 Meridian St E
Puyallup, WA 98375
(253) 847-7555

INVOICE

Date due 08/01/19

DATE	PAGE
06/30/19	3
INVOICE NUMBER	
8090	

AMOUNT DUE	AMOUNT PAID
569066.24	\$

ICHIJO USA CO., LTD.
YOSHIKO/TINA
1406 140TH PL NE STE 104
BELLEVUE WA 98007

ACCOUNT NO.
920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
06/12/19	03-00572632	ICH9 ICH8	34	SPECIAL WASTE-OUT CO	26.08	810.57
06/12/19	03-00572633		9	SPECIAL WASTE-OUT CO	23.95	744.37
06/12/19	03-00572635		8	SPECIAL WASTE-OUT CO	28.34	880.81
06/12/19	03-00572636		46	SPECIAL WASTE-OUT CO	26.40	820.51
06/12/19	03-00572645		30	SPECIAL WASTE-OUT CO	29.34	911.89
06/12/19	03-00572649		45	SPECIAL WASTE-OUT CO	25.16	781.97
06/13/19	03-00572667	ICH10 ICH8 ICH9 ICH45 ICH34	34	SPECIAL WASTE-OUT CO	26.81	833.25
06/13/19	03-00572669		007	SPECIAL WASTE-OUT CO	26.92	836.67
06/13/19	03-00572671		R10	SPECIAL WASTE-OUT CO	27.35	850.04
06/13/19	03-00572672		R8	SPECIAL WASTE-OUT CO	28.56	887.64
06/13/19	03-00572674		R9	SPECIAL WASTE-OUT CO	28.25	878.01
06/13/19	03-00572681		45	SPECIAL WASTE-OUT CO	28.49	885.47
06/13/19	03-00572701		31	SPECIAL WASTE-OUT CO	29.59	919.66
06/13/19	03-00572703		32	SPECIAL WASTE-OUT CO	31.59	981.82
06/13/19	03-00572723		48	SPECIAL WASTE-OUT CO	29.25	909.09
06/13/19	03-00572730		34	SPECIAL WASTE-OUT CO	33.13	1029.68
06/13/19	03-00572735		007	SPECIAL WASTE-OUT CO	29.74	924.32
06/13/19	03-00572737		10	SPECIAL WASTE-OUT CO	26.29	817.09
06/13/19	03-00572740		8	SPECIAL WASTE-OUT CO	27.29	848.17
06/13/19	03-00572744		R9	SPECIAL WASTE-OUT CO	26.47	822.69
06/13/19	03-00572747		45	SPECIAL WASTE-OUT CO	27.22	846.00
06/13/19	03-00572758		31	SPECIAL WASTE-OUT CO	26.80	832.94
06/13/19	03-00572764		32	SPECIAL WASTE-OUT CO	17.62	547.63
06/13/19	03-00572776		34	SPECIAL WASTE-OUT CO	24.25	753.69
06/13/19	03-00572780		48	SPECIAL WASTE-OUT CO	25.23	784.15
06/13/19	03-00572784		007	SPECIAL WASTE-OUT CO	22.77	707.69
06/13/19	03-00572788		10	SPECIAL WASTE-OUT CO	21.90	680.65
06/13/19	03-00572790		R8	SPECIAL WASTE-OUT CO	22.38	695.57
06/13/19	03-00572792		R9	SPECIAL WASTE-OUT CO	22.14	688.11
06/13/19	03-00572801		45	SPECIAL WASTE-OUT CO	23.25	722.61

30

PCRCO, LLC DBA LRI-304TH ST
 17925 Meridian St E
 Puyallup, WA 98375
 (253) 847-7555

INVOICE

Date due 08/01/19

DATE	PAGE
06/30/19	4
INVOICE NUMBER	
8090	

AMOUNT DUE	AMOUNT PAID
569066.24	\$

ICHIJO USA CO., LTD.
 YOSHIKO/TINA
 1406 140TH PL NE STE 104
 BELLEVUE WA 98007

ACCOUNT NO.

920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
06/13/19	03-00572814	ICH8	31	SPECIAL WASTE-OUT CO	23.02	715.46
06/13/19	03-00572816		32	SPECIAL WASTE-OUT CO	25.73	799.69
06/13/19	03-00572831		34	SPECIAL WASTE-OUT CO	27.08	841.65
06/13/19	03-00572835		007	SPECIAL WASTE-OUT CO	27.63	858.74
06/13/19	03-00572837		8	SPECIAL WASTE-OUT CO	26.92	836.67
06/13/19	03-00572839	ICH10	48	SPECIAL WASTE-OUT CO	29.24	908.78
06/13/19	03-00572842		R10	SPECIAL WASTE-OUT CO	25.30	786.32
06/13/19	03-00572843		R9	SPECIAL WASTE-OUT CO	24.68	767.05
06/13/19	03-00572849		45	SPECIAL WASTE-OUT CO	28.45	884.23
06/13/19	03-00572871		31	SPECIAL WASTE-OUT CO	28.99	901.01
06/13/19	03-00572873	ICH10	34	SPECIAL WASTE-OUT CO	27.10	842.27
06/13/19	03-00572879		007	SPECIAL WASTE-OUT CO	23.37	726.34
06/13/19	03-00572880		8	SPECIAL WASTE-OUT CO	24.65	766.12
06/13/19	03-00572883		10	SPECIAL WASTE-OUT CO	23.62	734.11
06/13/19	03-00572889		9	SPECIAL WASTE-OUT CO	23.46	729.14
06/13/19	03-00572891	ICH45	48	SPECIAL WASTE-OUT CO	28.80	895.10
06/13/19	03-00572894		45	SPECIAL WASTE-OUT CO	27.29	848.17
06/14/19	03-00572903	ICH10	10	SPECIAL WASTE-OUT CO	25.29	786.01
06/14/19	03-00572904	ICH9	9	SPECIAL WASTE-OUT CO	26.77	832.01
06/14/19	03-00572905	ICH8	8	SPECIAL WASTE-OUT CO	23.94	744.06
06/14/19	03-00572912	ICH30	30	SPECIAL WASTE-OUT CO	29.65	921.52
06/14/19	03-00572913	ICH31	31	SPECIAL WASTE-OUT CO	27.29	848.17
06/14/19	03-00572920	ICH32	32	SPECIAL WASTE-OUT CO	25.92	805.59
06/14/19	03-00572926	ICH33	33	SPECIAL WASTE-OUT CO	27.24	846.62
06/14/19	03-00572927	ICH35	35	SPECIAL WASTE-OUT CO	27.94	868.38
06/14/19	03-00572932	ICH12	12	SPECIAL WASTE-OUT CO	30.92	960.99
06/14/19	03-00572938	ICH8	08	SPECIAL WASTE-OUT CO	26.74	831.08
06/14/19	03-00572941	ICH29	29	SPECIAL WASTE-OUT CO	22.92	712.35
06/14/19	03-00572946	ICH46	46	SPECIAL WASTE-OUT CO	25.08	779.49
06/14/19	03-00572947	ICH27	27	SPECIAL WASTE-OUT CO	23.32	724.79

PCRCO, LLC DBA LRI-304TH ST
17925 Meridian St E
Puyallup, WA 98375
(253) 847-7555

INVOICE

Date due 08/01/19

DATE	PAGE
06/30/19	5
INVOICE NUMBER	
8090	

AMOUNT DUE	AMOUNT PAID
569066.24	\$

ICHIJO USA CO., LTD.
YOSHIKO/TINA
1406 140TH PL NE STE 104
BELLEVUE WA 98007

ACCOUNT NO.
920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
06/14/19	03-00572952	ICH5	05	SPECIAL WASTE-OUT CO	23.99	745.61
06/14/19	03-00572980	ICH8	8	SPECIAL WASTE-OUT CO	27.50	854.70
06/14/19	03-00572981	ICH10	10	SPECIAL WASTE-OUT CO	24.90	773.89
06/14/19	03-00572987	ICH30	30	SPECIAL WASTE-OUT CO	23.42	727.89
06/14/19	03-00572988	ICH9	9	SPECIAL WASTE-OUT CO	25.34	787.57
06/14/19	03-00572989	ICH31	31	SPECIAL WASTE-OUT CO	24.42	758.97
06/14/19	03-00572992	ICH32	32	SPECIAL WASTE-OUT CO	25.72	799.38
06/14/19	03-00572998	ICH33	33	SPECIAL WASTE-OUT CO	30.27	940.79
06/14/19	03-00572999	ICH35	35	SPECIAL WASTE-OUT CO	23.77	738.77
06/14/19	03-00573011	ICH12	12	SPECIAL WASTE-OUT CO	34.05	1058.27
06/14/19	03-00573012	ICH46	46	SPECIAL WASTE-OUT CO	27.56	856.56
06/14/19	03-00573015	ICH29	29	SPECIAL WASTE-OUT CO	24.14	750.27
06/14/19	03-00573017	ICH8	08	SPECIAL WASTE-OUT CO	28.93	899.14
06/14/19	03-00573020	ICH27	27	SPECIAL WASTE-OUT CO	21.01	652.99
06/14/19	03-00573024	ICH5	05	SPECIAL WASTE-OUT CO	25.03	777.93
06/14/19	03-00573033	ICH8	8	SPECIAL WASTE-OUT CO	27.96	869.00
06/14/19	03-00573035	ICH10	10	SPECIAL WASTE-OUT CO	24.18	751.51
06/14/19	03-00573038	ICH9	9	SPECIAL WASTE-OUT CO	25.32	786.95
06/14/19	03-00573052	ICH31	31	SPECIAL WASTE-OUT CO	28.77	894.17
06/14/19	03-00573054	ICH30	30	SPECIAL WASTE-OUT CO	25.73	799.69
06/14/19	03-00573061	ICH32	32	SPECIAL WASTE-OUT CO	26.01	808.39
06/14/19	03-00573072	ICH33	33	SPECIAL WASTE-OUT CO	26.88	835.43
06/14/19	03-00573074	ICH12	12	SPECIAL WASTE-OUT CO	27.16	844.13
06/14/19	03-00573082	ICH46	46	SPECIAL WASTE-OUT CO	23.55	731.93
06/14/19	03-00573087	ICH8	08	SPECIAL WASTE-OUT CO	27.85	865.58
06/14/19	03-00573091	ICH29	29	SPECIAL WASTE-OUT CO	24.72	768.30
06/14/19	03-00573095	ICH27	27	SPECIAL WASTE-OUT CO	24.04	747.16
06/14/19	03-00573096	ICH5	05	SPECIAL WASTE-OUT CO	25.46	791.30
06/14/19	03-00573103	ICH	R8	SPECIAL WASTE-OUT CO	24.57	763.64
06/14/19	03-00573106	ICH10	10	SPECIAL WASTE-OUT CO	24.30	755.24

PCRCO, LLC DBA LRI-304TH ST
17925 Meridian St E
Puyallup, WA 98375
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INVOICE

Date due 08/01/19

DATE	PAGE
06/30/19	6
INVOICE NUMBER	
8090	

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569066.24	\$

ICHIJO USA CO., LTD.
YOSHIKO/TINA
1406 140TH PL NE STE 104
BELLEVUE WA 98007

ACCOUNT NO.

920

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06/14/19	03-00573107	ICH9	9	SPECIAL WASTE-OUT CO	23.98	745.30
06/14/19	03-00573111	ICH31	31	SPECIAL WASTE-OUT CO	27.96	869.00
06/14/19	03-00573113	ICH30	30	SPECIAL WASTE-OUT CO	29.51	917.17
06/14/19	03-00573116	ICH32	32	SPECIAL WASTE-OUT CO	26.77	832.01
06/14/19	03-00573118	ICH35	35	SPECIAL WASTE-OUT CO	28.72	892.62
06/14/19	03-00573122	ICH12	12	SPECIAL WASTE-OUT CO	30.44	946.08
06/14/19	03-00573127	ICH33	33	SPECIAL WASTE-OUT CO	30.35	943.28
06/14/19	03-00573128	ICH46	46	SPECIAL WASTE-OUT CO	20.92	650.19
06/14/19	03-00573130	ICH29	29	SPECIAL WASTE-OUT CO	20.85	648.02
06/14/19	03-00573135	ICH27	27	SPECIAL WASTE-OUT CO	22.07	685.94
06/14/19	03-00573138	ICH5	05	SPECIAL WASTE-OUT CO	21.57	670.40
06/14/19	03-00573139	ICH1	1	SPECIAL WASTE-OUT CO	31.72	985.86
06/14/19	03-00573145	ICH10	10	SPECIAL WASTE-OUT CO	22.92	712.35
06/14/19	03-00573146	ICH9	9	SPECIAL WASTE-OUT CO	23.23	721.99
06/14/19	03-00573150	ICH8	8	SPECIAL WASTE-OUT CO	24.27	754.31
06/14/19	03-00573151	ICH31	31	SPECIAL WASTE-OUT CO	25.27	785.39
06/14/19	03-00573154	ICH30	30	SPECIAL WASTE-OUT CO	24.69	767.37
06/14/19	03-00573176	ICH32	32	SPECIAL WASTE-OUT CO	28.52	886.40
06/14/19	03-00573178	ICH35	35	SPECIAL WASTE-OUT CO	26.32	818.03
06/14/19	03-00573182	ICH46	46	SPECIAL WASTE-OUT CO	28.40	882.67
06/14/19	03-00573184	ICH33	33	SPECIAL WASTE-OUT CO	33.91	1053.92
06/14/19	03-00573185	ICH29	29	SPECIAL WASTE-OUT CO	26.32	818.03
06/14/19	03-00573186	ICH27	27	SPECIAL WASTE-OUT CO	25.47	791.61
06/17/19	03-00573290		60	SPECIAL WASTE-OUT CO	28.19	876.15
06/17/19	03-00573291		35	SPECIAL WASTE-OUT CO	27.34	849.73
06/17/19	03-00573295		33	SPECIAL WASTE-OUT CO	28.13	874.28
06/17/19	03-00573300		45	SPECIAL WASTE-OUT CO	26.35	818.96
06/17/19	03-00573306		43	SPECIAL WASTE-OUT CO	28.81	895.41
06/17/19	03-00573308		08	SPECIAL WASTE-OUT CO	27.70	860.92
06/17/19	03-00573316	ICH8	R8	SPECIAL WASTE-OUT CO	26.14	812.43

PCRCO, LLC DBA LRI-304TH ST
17925 Meridian St E
Puyallup, WA 98375
(253) 847-7555

INVOICE

Date due 08/01/19

DATE	PAGE
06/30/19	7
INVOICE NUMBER	
8090	

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569066.24	\$

ICHIJO USA CO., LTD.
YOSHIKO/TINA
1406 140TH PL NE STE 104
BELLEVUE WA 98007

ACCOUNT NO.
920

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DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
06/17/19	03-00573320		07	SPECIAL WASTE-OUT CO	28.46	884.54
06/17/19	03-00573328	ICH27	27	SPECIAL WASTE-OUT CO	25.24	784.46
06/17/19	03-00573329	ICH10	R10	SPECIAL WASTE-OUT CO	24.49	761.15
06/17/19	03-00573331	ICH9	R9	SPECIAL WASTE-OUT CO	25.78	801.24
06/17/19	03-00573334	ICH5	05	SPECIAL WASTE-OUT CO	27.24	846.62
06/17/19	03-00573335	ICH6	06	SPECIAL WASTE-OUT CO	27.58	857.19
06/17/19	03-00573343	ICH325	325	SPECIAL WASTE-OUT CO	28.89	897.90
06/17/19	03-00573367	ICH35	35	SPECIAL WASTE-OUT CO	25.87	804.04
06/17/19	03-00573368	ICH60	60	SPECIAL WASTE-OUT CO	27.76	862.78
06/17/19	03-00573372	ICH45	45	SPECIAL WASTE-OUT CO	27.46	853.46
06/17/19	03-00573375	ICH33	33	SPECIAL WASTE-OUT CO	29.48	916.24
06/17/19	03-00573378		43	SPECIAL WASTE-OUT CO	27.44	852.84
06/17/19	03-00573380	ICH8	8	SPECIAL WASTE-OUT CO	24.65	766.12
06/17/19	03-00573382	ICH8	08	SPECIAL WASTE-OUT CO	23.06	716.70
06/17/19	03-00573386	ICH7	07	SPECIAL WASTE-OUT CO	27.22	846.00
06/17/19	03-00573389	ICH10	R10	SPECIAL WASTE-OUT CO	21.11	656.10
06/17/19	03-00573390	ICH9	R9	SPECIAL WASTE-OUT CO	24.20	752.14
06/17/19	03-00573393	ICH6	06	SPECIAL WASTE-OUT CO	22.84	709.87
06/17/19	03-00573395	ICH5	05	SPECIAL WASTE-OUT CO	21.53	669.15
06/17/19	03-00573400	ICH325	325	SPECIAL WASTE-OUT CO	25.11	780.42
06/17/19	03-00573415		46	SPECIAL WASTE-OUT CO	26.18	813.67
06/17/19	03-00573420	ICH35	35	SPECIAL WASTE-OUT CO	25.71	799.07
06/17/19	03-00573423	ICH60	60	SPECIAL WASTE-OUT CO	25.70	798.76
06/17/19	03-00573431	ICH45	45	SPECIAL WASTE-OUT CO	25.84	803.11
06/17/19	03-00573436		27	SPECIAL WASTE-OUT CO	24.04	747.16
06/17/19	03-00573440		43	SPECIAL WASTE-OUT CO	28.20	876.46
06/17/19	03-00573445	ICH33	33	SPECIAL WASTE-OUT CO	25.85	803.42
06/17/19	03-00573446	ICH8	R8	SPECIAL WASTE-OUT CO	25.39	789.12
06/17/19	03-00573452	ICH08	08	SPECIAL WASTE-OUT CO	25.32	786.95
06/17/19	03-00573455		07	SPECIAL WASTE-OUT CO	26.87	835.12

PCRCO, LLC DBA LRI-304TH ST
 17925 Meridian St E
 Puyallup, WA 98375
 (253) 847-7555

INVOICE

Date due 08/01/19

DATE	PAGE
06/30/19	8
INVOICE NUMBER	
8090	

ICHIJO USA CO., LTD.
 YOSHIKO/TINA
 1406 140TH PL NE STE 104
 BELLEVUE WA 98007

AMOUNT DUE	AMOUNT PAID
569066.24	\$

ACCOUNT NO.
920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
06/17/19	03-00573459	ICH10	10	SPECIAL WASTE-OUT CO	24.58	763.95
06/17/19	03-00573460	ICH9	9	SPECIAL WASTE-OUT CO	25.24	784.46
06/17/19	03-00573462	ICH6	6	SPECIAL WASTE-OUT CO	25.43	790.36
06/17/19	03-00573464	ICH5	05	SPECIAL WASTE-OUT CO	24.20	752.14
06/17/19	03-00573469	ICH325	325	SPECIAL WASTE-OUT CO	26.00	808.08
06/17/19	03-00573472		46	SPECIAL WASTE-OUT CO	26.04	809.32
06/17/19	03-00573475		35	SPECIAL WASTE-OUT CO	29.57	919.04
06/17/19	03-00573478	ICH60	60	SPECIAL WASTE-OUT CO	26.71	830.15
06/17/19	03-00573482	ICH45	45	SPECIAL WASTE-OUT CO	26.46	822.38
06/17/19	03-00573490		DBE 27	SPECIAL WASTE-OUT CO	23.47	729.45
06/17/19	03-00573496		43	SPECIAL WASTE-OUT CO	27.09	841.96
06/17/19	03-00573498		33	SPECIAL WASTE-OUT CO	24.33	756.18
06/17/19	03-00573499	ICH8	R8	SPECIAL WASTE-OUT CO	25.01	777.31
06/17/19	03-00573502	ICH08	08	SPECIAL WASTE-OUT CO	28.74	893.24
06/17/19	03-00573505		07	SPECIAL WASTE-OUT CO	26.96	837.92
06/17/19	03-00573507	ICH10	R10	SPECIAL WASTE-OUT CO	24.00	745.92
06/17/19	03-00573508	ICH9	R9	SPECIAL WASTE-OUT CO	22.46	698.06
06/17/19	03-00573509	ICH6	06	SPECIAL WASTE-OUT CO	24.61	764.88
06/17/19	03-00573511		05	SPECIAL WASTE-OUT CO	23.14	719.19
06/17/19	03-00573512	ICH325	325	SPECIAL WASTE-OUT CO	26.45	822.07
06/17/19	03-00573517		46	SPECIAL WASTE-OUT CO	26.15	812.74
06/17/19	03-00573520		35	SPECIAL WASTE-OUT CO	26.17	813.36
06/17/19	03-00573521		60	SPECIAL WASTE-OUT CO	28.82	895.73
06/17/19	03-00573528	ICH45	45	SPECIAL WASTE-OUT CO	25.90	804.97
06/17/19	03-00573534		DBE 27	SPECIAL WASTE-OUT CO	23.24	722.30
06/17/19	03-00573547	ICH33	33	SPECIAL WASTE-OUT CO	26.81	833.25
06/17/19	03-00573548	ICH8	R8	SPECIAL WASTE-OUT CO	25.80	801.86
06/17/19	03-00573550	ICH10	10	SPECIAL WASTE-OUT CO	23.81	740.01
06/17/19	03-00573552		R9	SPECIAL WASTE-OUT CO	25.42	790.05
06/17/19	03-00573553		08	SPECIAL WASTE-OUT CO	28.09	873.04

PCRCO, LLC DBA LRI-304TH ST
 17925 Meridian St E
 Puyallup, WA 98375
 (253) 847-7555

INVOICE

Date due 08/01/19

DATE	PAGE
06/30/19	9
INVOICE NUMBER	
8090	

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 YOSHIKO/TINA
 1406 140TH PL NE STE 104
 BELLEVUE WA 98007

AMOUNT DUE	AMOUNT PAID
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920

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06/17/19	03-00573554		06	SPECIAL WASTE-OUT CO	24.60	764.57
06/17/19	03-00573558		07	SPECIAL WASTE-OUT CO	28.55	887.33
06/17/19	03-00573560		325	SPECIAL WASTE-OUT CO	23.30	724.16
06/17/19	03-00573562		05	SPECIAL WASTE-OUT CO	23.54	731.62
06/17/19	03-00573564		46	SPECIAL WASTE-OUT CO	25.95	806.53
06/18/19	03-00573574	ICH30	30	SPECIAL WASTE-OUT CO	29.49	916.55
06/18/19	03-00573578	ICH60	60	SPECIAL WASTE-OUT CO	32.24	1002.02
06/18/19	03-00573584	ICH25	25	SPECIAL WASTE-OUT CO	33.33	1035.90
06/18/19	03-00573590	ICH8	8	SPECIAL WASTE-OUT CO	23.45	728.83
06/18/19	03-00573597	ICH10	10	SPECIAL WASTE-OUT CO	21.26	660.76
06/18/19	03-00573601	ICH9	9	SPECIAL WASTE-OUT CO	22.38	695.57
06/18/19	03-00573610	ICH325	325	SPECIAL WASTE-OUT CO	28.95	899.77
06/18/19	03-00573612	ICH33	33	SPECIAL WASTE-OUT CO	32.46	1008.86
06/18/19	03-00573614	ICH35	35	SPECIAL WASTE-OUT CO	25.53	793.47
06/18/19	03-00573615	ICH08	08	SPECIAL WASTE-OUT CO	29.98	931.78
06/18/19	03-00573622	ICH	27 DBE	SPECIAL WASTE-OUT CO	28.15	874.90
06/18/19	03-00573634	ICH30	30	SPECIAL WASTE-OUT CO	27.32	849.11
06/18/19	03-00573639	ICH60	60	SPECIAL WASTE-OUT CO	23.42	727.89
06/18/19	03-00573641	ICH25	25	SPECIAL WASTE-OUT CO	26.99	838.85
06/18/19	03-00573642	ICH8	8	SPECIAL WASTE-OUT CO	25.36	788.19
06/18/19	03-00573643	ICH10	10	SPECIAL WASTE-OUT CO	25.29	786.01
06/18/19	03-00573647	ICH9	9	SPECIAL WASTE-OUT CO	29.17	906.60
06/18/19	03-00573650	ICH325	325	SPECIAL WASTE-OUT CO	32.97	1024.71
06/18/19	03-00573654	ICH35	35	SPECIAL WASTE-OUT CO	26.03	809.01
06/18/19	03-00573659	ICH33	33	SPECIAL WASTE-OUT CO	25.22	783.84
06/18/19	03-00573661	ICH08	08	SPECIAL WASTE-OUT CO	29.83	927.12
06/18/19	03-00573669	ICH27	27	SPECIAL WASTE-OUT CO	24.53	762.39
06/18/19	03-00573682	ICH30	30	SPECIAL WASTE-OUT CO	27.76	862.78
06/18/19	03-00573687	ICH60	60	SPECIAL WASTE-OUT CO	24.01	746.23
06/18/19	03-00573693	ICH7	7	SPECIAL WASTE-OUT CO	29.59	919.66

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17925 Meridian St E
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DATE	PAGE
06/30/19	10
INVOICE NUMBER	
8090	

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06/18/19	03-00573697	ICH25	25	SPECIAL WASTE-OUT CO	26.51	823.93
06/18/19	03-00573699	ICH8	8	SPECIAL WASTE-OUT CO	27.08	841.65
06/18/19	03-00573703	ICH10	10	SPECIAL WASTE-OUT CO	25.80	801.86
06/18/19	03-00573704	ICH9	9	SPECIAL WASTE-OUT CO	22.71	705.83
06/18/19	03-00573706	ICH325	325	SPECIAL WASTE-OUT CO	27.70	860.92
06/18/19	03-00573716	ICH35	35	SPECIAL WASTE-OUT CO	25.72	799.38
06/18/19	03-00573721	ICH33	33	SPECIAL WASTE-OUT CO	29.35	912.20
06/18/19	03-00573722	ICH8	8	SPECIAL WASTE-OUT CO	28.93	899.14
06/18/19	03-00573723	ICH27	27	SPECIAL WASTE-OUT CO	23.50	730.38
06/18/19	03-00573727	ICH30	30	SPECIAL WASTE-OUT CO	26.68	829.21
06/18/19	03-00573728	ICH60	60	SPECIAL WASTE-OUT CO	28.66	890.75
06/18/19	03-00573731	ICH7	7	SPECIAL WASTE-OUT CO	31.63	983.06
06/18/19	03-00573738	ICH25	25	SPECIAL WASTE-OUT CO	31.95	993.01
06/18/19	03-00573740	ICH8	8	SPECIAL WASTE-OUT CO	24.33	756.18
06/18/19	03-00573742	ICH9	9	SPECIAL WASTE-OUT CO	26.00	808.08
06/18/19	03-00573746	ICH10	10	SPECIAL WASTE-OUT CO	27.37	850.66
06/18/19	03-00573747	ICH325	325	SPECIAL WASTE-OUT CO	30.53	948.87
06/18/19	03-00573751	ICH35	35	SPECIAL WASTE-OUT CO	27.30	848.48
06/18/19	03-00573757	ICH33	33	SPECIAL WASTE-OUT CO	32.23	1001.71
06/18/19	03-00573759	ICH27	27	SPECIAL WASTE-OUT CO	25.99	807.77
06/18/19	03-00573760	ICH8	8	SPECIAL WASTE-OUT CO	31.40	975.91
06/18/19	03-00573763	ICH30	30	SPECIAL WASTE-OUT CO	28.09	873.04
06/18/19	03-00573769	ICH60	60	SPECIAL WASTE-OUT CO	27.85	865.58
06/18/19	03-00573781	ICH7	7	SPECIAL WASTE-OUT CO	32.42	1007.61
06/18/19	03-00573787	ICH25	25	SPECIAL WASTE-OUT CO	25.86	803.73
06/18/19	03-00573789	ICH8	8	SPECIAL WASTE-OUT CO	26.84	834.19
06/18/19	03-00573791	ICH9	9	SPECIAL WASTE-OUT CO	26.16	813.05
06/18/19	03-00573793	ICH10	10	SPECIAL WASTE-OUT CO	26.92	836.67
06/18/19	03-00573794	ICH325	325	SPECIAL WASTE-OUT CO	27.51	855.01
06/18/19	03-00573795	ICH35	35	SPECIAL WASTE-OUT CO	28.51	886.09

PCRCO, LLC DBA LRI-304TH ST
17925 Meridian St E
Puyallup, WA 98375
(253) 847-7555

INVOICE

Date due 08/01/19

DATE	PAGE
06/30/19	11
INVOICE NUMBER	
8090	

AMOUNT DUE	AMOUNT PAID
569066.24	\$

ICHIJO USA CO., LTD.
YOSHIKO/TINA
1406 140TH PL NE STE 104
BELLEVUE WA 98007

ACCOUNT NO.
920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
06/18/19	03-00573799	ICH27	27	SPECIAL WASTE-OUT CO	27.69	860.61
06/18/19	03-00573801	ICH33	33	SPECIAL WASTE-OUT CO	29.31	910.95
06/19/19	03-00573819	ICH43	43	SPECIAL WASTE-OUT CO	29.82	926.81
06/19/19	03-00573823	ICH60	60	SPECIAL WASTE-OUT CO	27.90	867.13
06/19/19	03-00573830	ICH25	25	SPECIAL WASTE-OUT CO	28.30	879.56
06/19/19	03-00573842	ICH35	35	SPECIAL WASTE-OUT CO	26.86	834.81
06/19/19	03-00573845	ICH8	8	SPECIAL WASTE-OUT CO	27.47	853.77
06/19/19	03-00573855	ICH10	10	SPECIAL WASTE-OUT CO	27.58	857.19
06/19/19	03-00573857	ICH9	9	SPECIAL WASTE-OUT CO	27.66	859.67
06/19/19	03-00573861	ICH33	33	SPECIAL WASTE-OUT CO	28.43	883.60
06/19/19	03-00573864	ICH325	325	SPECIAL WASTE-OUT CO	30.23	939.55
06/19/19	03-00573867	ICH27	27	SPECIAL WASTE-OUT CO	25.20	783.22
06/19/19	03-00573889	ICH43	43	SPECIAL WASTE-OUT CO	33.90	1053.61
06/19/19	03-00573891	ICH60	60	SPECIAL WASTE-OUT CO	31.99	994.25
06/19/19	03-00573892	ICH25	25	SPECIAL WASTE-OUT CO	35.10	1090.91
06/19/19	03-00573895	ICH08	8	SPECIAL WASTE-OUT CO	33.97	1055.79
06/19/19	03-00573897	ICH35	35	SPECIAL WASTE-OUT CO	31.70	985.24
06/19/19	03-00573901	ICH8	8	SPECIAL WASTE-OUT CO	30.93	961.30
06/19/19	03-00573903	ICH10	10	SPECIAL WASTE-OUT CO	30.18	937.99
06/19/19	03-00573910	ICH9	9	SPECIAL WASTE-OUT CO	29.01	901.63
06/19/19	03-00573920	ICH33	33	SPECIAL WASTE-OUT CO	37.81	1175.13
06/19/19	03-00573922	ICH325	325	SPECIAL WASTE-OUT CO	35.72	1110.18
06/19/19	03-00573960	ICH43	43	SPECIAL WASTE-OUT CO	32.20	1000.78
06/19/19	03-00573963	ICH60	60	SPECIAL WASTE-OUT CO	32.40	1006.99
06/19/19	03-00573967	ICH25	25	SPECIAL WASTE-OUT CO	34.56	1074.12
06/19/19	03-00573968	ICH8	8	SPECIAL WASTE-OUT CO	33.53	1042.11
06/19/19	03-00573971	ICH35	35	SPECIAL WASTE-OUT CO	25.74	800.00
06/19/19	03-00573972	ICH08	08	SPECIAL WASTE-OUT CO	27.30	848.48
06/19/19	03-00573974	ICH10	10	SPECIAL WASTE-OUT CO	25.65	797.20
06/19/19	03-00573981	ICH9	9	SPECIAL WASTE-OUT CO	26.94	837.30

PCRCO, LLC DBA LRI-304TH ST
 17925 Meridian St E
 Puyallup, WA 98375
 (253) 847-7555

INVOICE

Date due 08/01/19

DATE	PAGE
06/30/19	12
INVOICE NUMBER	
8090	

AMOUNT DUE	AMOUNT PAID
569066.24	\$

ICHIJO USA CO., LTD.
 YOSHIKO/TINA
 1406 140TH PL NE STE 104
 BELLEVUE WA 98007

ACCOUNT NO.
920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
06/19/19	03-00573994	ICH33	33	SPECIAL WASTE-OUT CO	29.17	906.60
06/19/19	03-00573995	ICH325	325	SPECIAL WASTE-OUT CO	29.76	924.94
06/19/19	03-00573999	ICH27	28	SPECIAL WASTE-OUT CO	28.91	898.52
06/19/19	03-00574012		60	SPECIAL WASTE-OUT CO	26.89	835.74
06/19/19	03-00574013	ICH43	43	SPECIAL WASTE-OUT CO	32.11	997.98
06/19/19	03-00574016	ICH25	25	SPECIAL WASTE-OUT CO	26.84	834.19
06/19/19	03-00574018	ICH35	35	SPECIAL WASTE-OUT CO	28.89	897.90
06/19/19	03-00574020	ICH8	8	SPECIAL WASTE-OUT CO	23.46	729.14
06/19/19	03-00574021	ICH08	08	SPECIAL WASTE-OUT CO	28.83	896.04
06/19/19	03-00574028	ICH10	10	SPECIAL WASTE-OUT CO	24.72	768.30
06/19/19	03-00574033	ICH9	9	SPECIAL WASTE-OUT CO	26.44	821.76
06/19/19	03-00574035	ICH33	33	SPECIAL WASTE-OUT CO	28.59	888.58
06/19/19	03-00574037	ICH325	325	SPECIAL WASTE-OUT CO	25.41	789.74
06/19/19	03-00574039	ICH27	28	SPECIAL WASTE-OUT CO	25.22	783.84
06/19/19	03-00574052	ICH60	60	SPECIAL WASTE-OUT CO	30.79	956.95
06/19/19	03-00574057	ICH25	25	SPECIAL WASTE-OUT CO	27.31	848.79
06/19/19	03-00574062	ICH35	35	SPECIAL WASTE-OUT CO	29.74	924.32
06/19/19	03-00574069	ICH8	8	SPECIAL WASTE-OUT CO	26.74	831.08
06/19/19	03-00574071	ICH08	08	SPECIAL WASTE-OUT CO	32.29	1003.57
06/19/19	03-00574073	ICH10	10	SPECIAL WASTE-OUT CO	29.39	913.44
06/19/19	03-00574078	ICH9	9	SPECIAL WASTE-OUT CO	25.65	797.20
06/20/19	03-00574101	ICH60	60	SPECIAL WASTE-OUT CO	25.88	804.35
06/20/19	03-00574104	ICH10	10	SPECIAL WASTE-OUT CO	26.32	818.03
06/20/19	03-00574122	ICH9	R9	SPECIAL WASTE-OUT CO	28.49	885.47
06/20/19	03-00574123	ICH8	R8	SPECIAL WASTE-OUT CO	25.34	787.57
06/20/19	03-00574130	ICH35	35	SPECIAL WASTE-OUT CO	27.43	852.52
06/20/19	03-00574135	ICH325	325	SPECIAL WASTE-OUT CO	29.46	915.62
06/20/19	03-00574142	ICH33	33	SPECIAL WASTE-OUT CO	31.41	976.22
06/20/19	03-00574146	ICH30	30	SPECIAL WASTE-OUT CO	31.25	971.25
06/20/19	03-00574147		42	SPECIAL WASTE-OUT CO	32.29	1003.57

PCRCD, LLC DBA LRI-304TH ST
17925 Meridian St E
Puyallup, WA 98375
(253) 847-7555

INVOICE

Date due 08/01/19

DATE	PAGE
06/30/19	13
INVOICE NUMBER	
8090	

AMOUNT DUE	AMOUNT PAID
569066.24	\$

ICHIJO USA CO., LTD.
YOSHIKO/TINA
1406 140TH PL NE STE 104
BELLEVUE WA 98007

ACCOUNT NO.

920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
06/20/19	03-00574150		028	SPECIAL WASTE-OUT CO	28.49	885.47
06/20/19	03-00574161	ICH60	60	SPECIAL WASTE-OUT CO	27.74	862.16
06/20/19	03-00574162	ICH10	R10	SPECIAL WASTE-OUT CO	27.55	856.25
06/20/19	03-00574168	ICH8	R8	SPECIAL WASTE-OUT CO	29.55	918.41
06/20/19	03-00574172	ICH9	R9	SPECIAL WASTE-OUT CO	30.37	943.90
06/20/19	03-00574175	ICH35	35	SPECIAL WASTE-OUT CO	36.60	1137.53
06/20/19	03-00574179	ICH325	325	SPECIAL WASTE-OUT CO	23.54	731.62
06/20/19	03-00574184	ICH33	33	SPECIAL WASTE-OUT CO	30.15	937.06
06/20/19	03-00574187	ICH08	08	SPECIAL WASTE-OUT CO	28.94	899.46
06/20/19	03-00574188	ICH28	028	SPECIAL WASTE-OUT CO	27.23	846.31
06/20/19	03-00574209	ICH42	42	SPECIAL WASTE-OUT CO	33.54	1042.42
06/20/19	03-00574213	ICH60	60	SPECIAL WASTE-OUT CO	28.25	878.01
06/20/19	03-00574225	ICH10	R10	SPECIAL WASTE-OUT CO	24.67	766.74
06/20/19	03-00574228	ICH8	R8	SPECIAL WASTE-OUT CO	27.36	850.35
06/20/19	03-00574232	ICH9	R9	SPECIAL WASTE-OUT CO	26.32	818.03
06/20/19	03-00574234	ICH35	35	SPECIAL WASTE-OUT CO	27.27	847.55
06/20/19	03-00574236	ICH325	325	SPECIAL WASTE-OUT CO	32.36	1005.75
06/20/19	03-00574248		33	SPECIAL WASTE-OUT CO	30.98	962.86
06/20/19	03-00574249	ICH08	08	SPECIAL WASTE-OUT CO	31.15	968.14
06/20/19	03-00574251		028	SPECIAL WASTE-OUT CO	27.43	852.52
06/20/19	03-00574260	ICH60	60	SPECIAL WASTE-OUT CO	27.12	842.89
06/20/19	03-00574261		42	SPECIAL WASTE-OUT CO	29.34	911.89
06/20/19	03-00574263	ICH10	R10	SPECIAL WASTE-OUT CO	23.32	724.79
06/20/19	03-00574265	ICH8	R8	SPECIAL WASTE-OUT CO	23.55	731.93
06/20/19	03-00574268	ICH9	9	SPECIAL WASTE-OUT CO	26.90	836.05
06/20/19	03-00574271	ICH35	35	SPECIAL WASTE-OUT CO	26.61	827.04
06/20/19	03-00574272	ICH325	325	SPECIAL WASTE-OUT CO	27.62	858.43
06/20/19	03-00574277	ICH33	33	SPECIAL WASTE-OUT CO	24.75	769.23
06/20/19	03-00574281	ICH08	08	SPECIAL WASTE-OUT CO	25.99	807.77
06/20/19	03-00574299		028	SPECIAL WASTE-OUT CO	26.03	809.01

PCRCD, LLC DBA LRI-304TH ST
 17925 Meridian St E
 Puyallup, WA 98375
 (253) 847-7555

INVOICE

Date due 08/01/19

DATE	PAGE
06/30/19	14
INVOICE NUMBER	
8090	

AMOUNT DUE	AMOUNT PAID
569066.24	\$

ICHIJO USA CO., LTD.
 YOSHIKO/TINA
 1406 140TH PL NE STE 104
 BELLEVUE WA 98007

ACCOUNT NO.
920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
06/20/19	03-00574313	ICH8	8	SPECIAL WASTE-OUT CO	27.86	865.89
06/20/19	03-00574315		42	SPECIAL WASTE-OUT CO	32.93	1023.46
06/20/19	03-00574316		R10	SPECIAL WASTE-OUT CO	27.17	844.44
06/20/19	03-00574318	ICH9	R9	SPECIAL WASTE-OUT CO	26.64	827.97
06/20/19	03-00574321	ICH35	35	SPECIAL WASTE-OUT CO	28.72	892.62
06/20/19	03-00574322	ICH325	325	SPECIAL WASTE-OUT CO	28.67	891.06
06/21/19	03-00574348	ICH60	60	SPECIAL WASTE-OUT CO	23.78	739.08
06/21/19	03-00574350	ICH8	8	SPECIAL WASTE-OUT CO	24.54	762.70
06/21/19	03-00574359	ICH9	9	SPECIAL WASTE-OUT CO	26.07	810.26
06/21/19	03-00574371	ICH33	33	SPECIAL WASTE-OUT CO	29.22	908.16
06/21/19	03-00574374	ICH35	35	SPECIAL WASTE-OUT CO	26.88	835.43
06/21/19	03-00574381	ICH325	325	SPECIAL WASTE-OUT CO	26.64	827.97
06/21/19	03-00574382	ICH42	42	SPECIAL WASTE-OUT CO	27.99	869.93
06/21/19	03-00574389	ICH28	028	SPECIAL WASTE-OUT CO	25.37	788.50
06/21/19	03-00574391	ICH7	7	SPECIAL WASTE-OUT CO	28.32	880.19
06/21/19	03-00574393	ICH32	32	SPECIAL WASTE-OUT CO	26.20	814.30
06/21/19	03-00574416	ICH60	60	SPECIAL WASTE-OUT CO	30.31	942.03
06/21/19	03-00574419	ICH8	8	SPECIAL WASTE-OUT CO	30.96	962.24
06/21/19	03-00574424	ICH9	9	SPECIAL WASTE-OUT CO	27.48	854.08
06/21/19	03-00574427	ICH35	35	SPECIAL WASTE-OUT CO	28.06	872.10
06/21/19	03-00574430	ICH33	33	SPECIAL WASTE-OUT CO	33.13	1029.68
06/21/19	03-00574431	ICH325	325	SPECIAL WASTE-OUT CO	35.02	1088.42
06/21/19	03-00574436	ICH28	28	SPECIAL WASTE-OUT CO	27.93	868.06
06/21/19	03-00574443	ICH7	MTE 7	SPECIAL WASTE-OUT CO	28.03	871.17
06/21/19	03-00574450	ICH32	32	SPECIAL WASTE-OUT CO	33.75	1048.95
06/21/19	03-00574477	ICH44	44	SPECIAL WASTE-OUT CO	35.23	1094.95
06/21/19	03-00574479	ICH60	60	SPECIAL WASTE-OUT CO	32.31	1004.19
06/21/19	03-00574484	ICH42	42	SPECIAL WASTE-OUT CO	37.44	1163.64
06/21/19	03-00574487	ICH8	8	SPECIAL WASTE-OUT CO	30.48	947.32
06/21/19	03-00574499	ICH9	9	SPECIAL WASTE-OUT CO	29.90	929.29

PCRCD, LLC DBA LRI-304TH ST
17925 Meridian St E
Puyallup, WA 98375
(253) 847-7555

INVOICE

Date due 08/01/19

DATE	PAGE
06/30/19	15
INVOICE NUMBER	
8090	

AMOUNT DUE	AMOUNT PAID
569066.24	\$

ICHIJO USA CO., LTD.
YOSHIKO/TINA
1406 140TH PL NE STE 104
BELLEVUE WA 98007

ACCOUNT NO.
920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
06/21/19	03-00574500	ICH35	35	SPECIAL WASTE-OUT CO	28.96	900.08
06/21/19	03-00574506	ICH33	33	SPECIAL WASTE-OUT CO	30.86	959.13
06/21/19	03-00574510	ICH325	325	SPECIAL WASTE-OUT CO	31.23	970.63
06/21/19	03-00574512	ICH28	28	SPECIAL WASTE-OUT CO	29.68	922.45
06/21/19	03-00574520	ICH7	7	SPECIAL WASTE-OUT CO	31.73	986.17
06/21/19	03-00574534	ICH60	60	SPECIAL WASTE-OUT CO	30.97	962.55
06/21/19	03-00574538	ICH8	8	SPECIAL WASTE-OUT CO	28.82	895.73
06/21/19	03-00574540	ICH9	9	SPECIAL WASTE-OUT CO	30.45	946.39
06/21/19	03-00574545	ICH35	35	SPECIAL WASTE-OUT CO	29.00	901.32
06/21/19	03-00574551	ICH325	325	SPECIAL WASTE-OUT CO	24.80	770.78
06/21/19	03-00574552	ICH33	33	SPECIAL WASTE-OUT CO	27.97	869.31
06/21/19	03-00574555	ICH28	28	SPECIAL WASTE-OUT CO	20.60	640.25
06/21/19	03-00574559	ICH42	42	SPECIAL WASTE-OUT CO	25.21	783.53
06/21/19	03-00574566	ICH7	7	SPECIAL WASTE-OUT CO	25.69	798.45
06/21/19	03-00574570	ICH60	60	SPECIAL WASTE-OUT CO	27.80	864.02
06/21/19	03-00574578	ICH44	44	SPECIAL WASTE-OUT CO	31.29	972.49
06/21/19	03-00574580	ICH9	9	SPECIAL WASTE-OUT CO	28.84	896.35
06/21/19	03-00574588	ICH325	325	SPECIAL WASTE-OUT CO	32.80	1019.42
06/21/19	03-00574589	ICH35	35	SPECIAL WASTE-OUT CO	28.00	870.24
06/21/19	03-00574593	ICH28	28	SPECIAL WASTE-OUT CO	27.45	853.15
06/24/19	03-00574715		60	SPECIAL WASTE-OUT CO	28.87	897.28
06/24/19	03-00574717	ICH10	R10	SPECIAL WASTE-OUT CO	29.32	911.27
06/24/19	03-00574725	ICH8	08	SPECIAL WASTE-OUT CO	32.67	1015.38
06/24/19	03-00574730	ICH9	R09	SPECIAL WASTE-OUT CO	30.63	951.98
06/24/19	03-00574732	ICH33	33	SPECIAL WASTE-OUT CO	32.01	994.87
06/24/19	03-00574735	ICH35	35	SPECIAL WASTE-OUT CO	29.87	928.36
06/24/19	03-00574742	ICH325	325	SPECIAL WASTE-OUT CO	31.51	979.33
06/24/19	03-00574745	ICH42	42	SPECIAL WASTE-OUT CO	32.44	1008.24
06/24/19	03-00574749	ICH30	30	SPECIAL WASTE-OUT CO	26.83	833.88
06/24/19	03-00574752	ICH6	06	SPECIAL WASTE-OUT CO	29.57	919.04

PCRCO, LLC DBA LRI-304TH ST
17925 Meridian St E
Puyallup, WA 98375
(253) 847-7555

INVOICE

Date due 08/01/19

DATE	PAGE
06/30/19	16
INVOICE NUMBER	
8090	

AMOUNT DUE	AMOUNT PAID
569066.24	\$

ICHIJO USA CO., LTD.
YOSHIKO/TINA
1406 140TH PL NE STE 104
BELLEVUE WA 98007

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920

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DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
06/24/19	03-00574754	ICH2	02	SPECIAL WASTE-OUT CO	28.38	882.05
06/24/19	03-00574759	ICH31	31	SPECIAL WASTE-OUT CO	31.33	973.74
06/24/19	03-00574781	ICH60	60	SPECIAL WASTE-OUT CO	29.80	926.18
06/24/19	03-00574784	ICH10	R10	SPECIAL WASTE-OUT CO	33.26	1033.72
06/24/19	03-00574786	ICH08	08	SPECIAL WASTE-OUT CO	26.51	823.93
06/24/19	03-00574788	ICH9	09	SPECIAL WASTE-OUT CO	29.24	908.78
06/24/19	03-00574789	ICH33	33	SPECIAL WASTE-OUT CO	31.26	971.56
06/24/19	03-00574791	ICH35	35	SPECIAL WASTE-OUT CO	27.57	856.88
06/24/19	03-00574792	ICH325	325	SPECIAL WASTE-OUT CO	30.13	936.44
06/24/19	03-00574794	ICH30	30	SPECIAL WASTE-OUT CO	27.33	849.42
06/24/19	03-00574796	ICH42	42	SPECIAL WASTE-OUT CO	28.44	883.92
06/24/19	03-00574799	ICH6	06	SPECIAL WASTE-OUT CO	29.95	930.85
06/24/19	03-00574805	ICH2	02	SPECIAL WASTE-OUT CO	27.98	869.62
06/24/19	03-00574807	ICH31	31	SPECIAL WASTE-OUT CO	28.95	899.77
06/24/19	03-00574827	ICH60	60	SPECIAL WASTE-OUT CO	32.19	1000.47
06/24/19	03-00574830	ICH10	R10	SPECIAL WASTE-OUT CO	32.27	1002.95
06/24/19	03-00574835	ICH8	08	SPECIAL WASTE-OUT CO	33.24	1033.10
06/24/19	03-00574837	ICH9	9	SPECIAL WASTE-OUT CO	29.82	926.81
06/24/19	03-00574848	ICH33	33	SPECIAL WASTE-OUT CO	26.80	832.94
06/24/19	03-00574850	ICH35	35	SPECIAL WASTE-OUT CO	28.39	882.36
06/24/19	03-00574854	ICH325	325	SPECIAL WASTE-OUT CO	28.12	873.97
06/24/19	03-00574859		30	SPECIAL WASTE-OUT CO	28.57	887.96
06/24/19	03-00574865	ICH42	42	SPECIAL WASTE-OUT CO	29.75	924.63
06/24/19	03-00574866		06	SPECIAL WASTE-OUT CO	26.71	830.15
06/24/19	03-00574869	ICH2	02	SPECIAL WASTE-OUT CO	27.45	853.15
06/24/19	03-00574871	ICH31	31	SPECIAL WASTE-OUT CO	27.75	862.47
06/24/19	03-00574878	ICH60	60	SPECIAL WASTE-OUT CO	27.10	842.27
06/24/19	03-00574880	ICH8	R8	SPECIAL WASTE-OUT CO	27.42	852.21
06/24/19	03-00574882	ICH10	R10	SPECIAL WASTE-OUT CO	27.08	841.65
06/24/19	03-00574885	ICH9	09	SPECIAL WASTE-OUT CO	26.07	810.26

PCRCO, LLC DBA LRI-304TH ST
17925 Meridian St E
Puyallup, WA 98375
(253) 847-7555

INVOICE

Date due 08/01/19

DATE	PAGE
06/30/19	17
INVOICE NUMBER	
8090	

AMOUNT DUE	AMOUNT PAID
569066.24	\$

ICHIJO USA CO., LTD.
YOSHIKO/TINA
1406 140TH PL NE STE 104
BELLEVUE WA 98007

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920

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DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
06/24/19	03-00574893	ICH33	33	SPECIAL WASTE-OUT CO	26.65	828.28
06/24/19	03-00574898	ICH35	35	SPECIAL WASTE-OUT CO	22.75	707.07
06/24/19	03-00574901	ICH325	325	SPECIAL WASTE-OUT CO	26.68	829.21
06/24/19	03-00574903		30	SPECIAL WASTE-OUT CO	26.35	818.96
06/24/19	03-00574907	ICH42	42	SPECIAL WASTE-OUT CO	27.16	844.13
06/24/19	03-00574911	ICH2	2	SPECIAL WASTE-OUT CO	25.96	806.84
06/24/19	03-00574912	ICH60	60	SPECIAL WASTE-OUT CO	21.92	681.27
06/24/19	03-00574914		06	SPECIAL WASTE-OUT CO	24.77	769.85
06/24/19	03-00574920	ICH8	R8	SPECIAL WASTE-OUT CO	24.44	759.60
06/24/19	03-00574927	ICH10	R10	SPECIAL WASTE-OUT CO	21.28	661.38
06/24/19	03-00574931	ICH9	09	SPECIAL WASTE-OUT CO	22.83	709.56
06/24/19	03-00574939	ICH33	33	SPECIAL WASTE-OUT CO	25.95	806.53
06/24/19	03-00574940	ICH325	325	SPECIAL WASTE-OUT CO	28.27	878.63
06/24/19	03-00574941	ICH35	35	SPECIAL WASTE-OUT CO	28.96	900.08
06/25/19	03-00574963	ICH60	60	SPECIAL WASTE-OUT CO	20.67	642.42
06/25/19	03-00574968	ICH8	8	SPECIAL WASTE-OUT CO	27.86	865.89
06/25/19	03-00574974	ICH25	25	SPECIAL WASTE-OUT CO	29.29	910.33
06/25/19	03-00574981	ICH9	9	SPECIAL WASTE-OUT CO	31.36	974.67
06/25/19	03-00574983	ICH10	10	SPECIAL WASTE-OUT CO	31.45	977.47
06/25/19	03-00574995	ICH42	42	SPECIAL WASTE-OUT CO	30.79	956.95
06/25/19	03-00574996	ICH33	33	SPECIAL WASTE-OUT CO	30.36	943.59
06/25/19	03-00574997	ICH35	35	SPECIAL WASTE-OUT CO	32.00	994.56
06/25/19	03-00574999	ICH325	325	SPECIAL WASTE-OUT CO	30.88	959.75
06/25/19	03-00575004	ICH27	27	SPECIAL WASTE-OUT CO	27.57	856.88
06/25/19	03-00575037	ICH60	60	SPECIAL WASTE-OUT CO	25.92	805.59
06/25/19	03-00575039	ICH8	8	SPECIAL WASTE-OUT CO	27.29	848.17
06/25/19	03-00575040	ICH25	25	SPECIAL WASTE-OUT CO	26.37	819.58
06/25/19	03-00575041	ICH9	9	SPECIAL WASTE-OUT CO	25.28	785.70
06/25/19	03-00575044	ICH10	10	SPECIAL WASTE-OUT CO	25.51	792.85
06/25/19	03-00575050	ICH31	31	SPECIAL WASTE-OUT CO	26.61	827.04

PCRCD, LLC DBA LRI-304TH ST
 17925 Meridian St E
 Puyallup, WA 98375
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INVOICE

Date due 08/01/19

DATE	PAGE
06/30/19	18
INVOICE NUMBER	
8090	

AMOUNT DUE	AMOUNT PAID
569066.24	\$

ICHIJO USA CO., LTD.
 YOSHIKO/TINA
 1406 140TH PL NE STE 104
 BELLEVUE WA 98007

ACCOUNT NO.

920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
06/25/19	03-00575056	ICH42	42	SPECIAL WASTE-OUT CO	28.84	896.35
06/25/19	03-00575058	ICH35	35	SPECIAL WASTE-OUT CO	27.32	849.11
06/25/19	03-00575060	ICH33	33	SPECIAL WASTE-OUT CO	32.19	1000.47
06/25/19	03-00575067		27	SPECIAL WASTE-OUT CO	26.91	836.36
06/25/19	03-00575068	ICH325	325	SPECIAL WASTE-OUT CO	29.37	912.82
06/25/19	03-00575090	ICH60	60	SPECIAL WASTE-OUT CO	32.62	1013.83
06/25/19	03-00575099	ICH8	8	SPECIAL WASTE-OUT CO	30.80	957.26
06/25/19	03-00575104	ICH9	9	SPECIAL WASTE-OUT CO	29.60	919.97
06/25/19	03-00575106	ICH25	25	SPECIAL WASTE-OUT CO	30.08	934.89
06/25/19	03-00575109	ICH10	10	SPECIAL WASTE-OUT CO	27.28	847.86
06/25/19	03-00575125		42	SPECIAL WASTE-OUT CO	30.80	957.26
06/25/19	03-00575127	ICH35	35	SPECIAL WASTE-OUT CO	31.78	987.72
06/25/19	03-00575134		33	SPECIAL WASTE-OUT CO	31.81	988.65
06/25/19	03-00575136	ICH27	27	SPECIAL WASTE-OUT CO	24.66	766.43
06/25/19	03-00575137	ICH325	325	SPECIAL WASTE-OUT CO	28.92	898.83
06/25/19	03-00575148	ICH60	60	SPECIAL WASTE-OUT CO	25.70	798.76
06/25/19	03-00575151	ICH8	8	SPECIAL WASTE-OUT CO	27.52	855.32
06/25/19	03-00575156	ICH9	9	SPECIAL WASTE-OUT CO	25.12	780.73
06/25/19	03-00575158	ICH25	25	SPECIAL WASTE-OUT CO	25.41	789.74
06/25/19	03-00575164	ICH10	10	SPECIAL WASTE-OUT CO	26.20	814.30
06/25/19	03-00575175	ICH35	35	SPECIAL WASTE-OUT CO	23.96	744.68
06/25/19	03-00575187	ICH42	42	SPECIAL WASTE-OUT CO	27.40	851.59
06/25/19	03-00575189	ICH33	33	SPECIAL WASTE-OUT CO	31.43	976.84
06/25/19	03-00575191	ICH27	27	SPECIAL WASTE-OUT CO	28.85	896.66
06/25/19	03-00575194	ICH325	325	SPECIAL WASTE-OUT CO	31.41	976.22
06/25/19	03-00575196	ICH60	60	SPECIAL WASTE-OUT CO	29.89	928.98
06/25/19	03-00575198	ICH8	8	SPECIAL WASTE-OUT CO	30.20	938.62
06/25/19	03-00575205	ICH9	9	SPECIAL WASTE-OUT CO	29.27	909.71
06/25/19	03-00575207	ICH25	25	SPECIAL WASTE-OUT CO	32.17	999.84
06/25/19	03-00575219	ICH10	10	SPECIAL WASTE-OUT CO	27.96	869.00

PCRCO, LLC DBA LRI-304TH ST
17925 Meridian St E
Puyallup, WA 98375
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Date due 08/01/19

DATE	PAGE
06/30/19	19
INVOICE NUMBER	
8090	

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1406 140TH PL NE STE 104
BELLEVUE WA 98007

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920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
06/26/19	03-00575225	ICH35	35	SPECIAL WASTE-OUT CO	30.75	955.71
06/26/19	03-00575238	ICH8	8	SPECIAL WASTE-OUT CO	29.45	915.31
06/26/19	03-00575241	ICH9	9	SPECIAL WASTE-OUT CO	29.42	914.37
06/26/19	03-00575242	ICH10	10	SPECIAL WASTE-OUT CO	30.00	932.40
06/26/19	03-00575252	ICH25	25	SPECIAL WASTE-OUT CO	27.98	869.62
06/26/19	03-00575258	ICH08	08	SPECIAL WASTE-OUT CO	27.18	844.75
06/26/19	03-00575261	ICH33	33	SPECIAL WASTE-OUT CO	30.77	956.33
06/26/19	03-00575263	ICH42	42	SPECIAL WASTE-OUT CO	30.43	945.76
06/26/19	03-00575269	ICH325	325	SPECIAL WASTE-OUT CO	28.05	871.79
06/26/19	03-00575288	ICH27	27	SPECIAL WASTE-OUT CO	24.71	767.99
06/26/19	03-00575297	ICH35	35	SPECIAL WASTE-OUT CO	27.72	861.54
06/26/19	03-00575304	ICH8	8	SPECIAL WASTE-OUT CO	26.19	813.99
06/26/19	03-00575305	ICH9	9	SPECIAL WASTE-OUT CO	27.52	855.32
06/26/19	03-00575307	ICH10	10	SPECIAL WASTE-OUT CO	30.36	943.59
06/26/19	03-00575310	ICH25	25	SPECIAL WASTE-OUT CO	31.26	971.56
06/26/19	03-00575311	ICH08	08	SPECIAL WASTE-OUT CO	30.13	936.44
06/26/19	03-00575318	ICH33	33	SPECIAL WASTE-OUT CO	28.82	895.73
06/26/19	03-00575321	ICH325	325	SPECIAL WASTE-OUT CO	27.71	861.23
06/26/19	03-00575329	ICH27	27	SPECIAL WASTE-OUT CO	27.03	840.09
06/26/19	03-00575362	ICH35	35	SPECIAL WASTE-OUT CO	30.24	939.86
06/26/19	03-00575367	ICH8	8	SPECIAL WASTE-OUT CO	30.84	958.51
06/26/19	03-00575370	ICH42	TERRY 42	SPECIAL WASTE-OUT CO	27.81	864.33
06/26/19	03-00575374	ICH9	9	SPECIAL WASTE-OUT CO	31.10	966.59
06/26/19	03-00575379	ICH25	25	SPECIAL WASTE-OUT CO	28.74	893.24
06/26/19	03-00575382	ICH10	10	SPECIAL WASTE-OUT CO	27.98	869.62
06/26/19	03-00575383	ICH08	08	SPECIAL WASTE-OUT CO	25.64	796.89
06/26/19	03-00575388	ICH33	33	SPECIAL WASTE-OUT CO	29.78	925.56
06/26/19	03-00575389	ICH325	325	SPECIAL WASTE-OUT CO	30.88	959.75
06/26/19	03-00575406	ICH27	27	SPECIAL WASTE-OUT CO	28.19	876.15
06/26/19	03-00575420	ICH35	35	SPECIAL WASTE-OUT CO	29.63	920.90

PCRCO, LLC DBA LRI-304TH ST
 17925 Meridian St E
 Puyallup, WA 98375
 (253) 847-7555

INVOICE

Date due 08/01/19

DATE	PAGE
06/30/19	20
INVOICE NUMBER	
8090	

ICHIJO USA CO., LTD.
 YOSHIKO/TINA
 1406 140TH PL NE STE 104
 BELLEVUE WA 98007

AMOUNT DUE	AMOUNT PAID
569066.24	\$

ACCOUNT NO.
920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
06/26/19	03-00575421	ICH1	R8	SPECIAL WASTE-OUT CO	29.93	930.22
06/26/19	03-00575422	ICH42	42	SPECIAL WASTE-OUT CO	31.88	990.83
06/26/19	03-00575426	ICH25	25	SPECIAL WASTE-OUT CO	33.35	1036.52
06/26/19	03-00575430	ICH9	9	SPECIAL WASTE-OUT CO	30.43	945.76
06/26/19	03-00575432	ICH10	10	SPECIAL WASTE-OUT CO	28.69	891.69
06/26/19	03-00575435	ICH08	08	SPECIAL WASTE-OUT CO	32.46	1008.86
06/26/19	03-00575439	ICH325	325	SPECIAL WASTE-OUT CO	30.37	943.90
06/26/19	03-00575446	ICH33	33	SPECIAL WASTE-OUT CO	27.74	862.16
06/26/19	03-00575451	ICH27	27	SPECIAL WASTE-OUT CO	27.11	842.58
06/26/19	03-00575470	ICH35	35	SPECIAL WASTE-OUT CO	29.21	907.85
06/26/19	03-00575471	ICH8	8	SPECIAL WASTE-OUT CO	27.44	852.84
06/26/19	03-00575475	ICH25	25	SPECIAL WASTE-OUT CO	25.50	792.54
06/26/19	03-00575480	ICH9	9	SPECIAL WASTE-OUT CO	28.13	874.28
06/26/19	03-00575483	ICH10	10	SPECIAL WASTE-OUT CO	28.07	872.42
06/26/19	03-00575484	ICH325	325	SPECIAL WASTE-OUT CO	30.04	933.64
06/26/19	03-00575486	ICH08	08	SPECIAL WASTE-OUT CO	27.09	841.96
06/26/19	03-00575493		33	SPECIAL WASTE-OUT CO	34.78	1080.96
06/26/19	03-00575494		27	SPECIAL WASTE-OUT CO	29.71	923.39
06/27/19	03-00575508	ICH60	60	SPECIAL WASTE-OUT CO	31.29	972.49
06/27/19	03-00575510	ICH25	25	SPECIAL WASTE-OUT CO	30.50	947.94
06/27/19	03-00575512	ICH8	R8	SPECIAL WASTE-OUT CO	30.18	937.99
06/27/19	03-00575520	ICH13	13	SPECIAL WASTE-OUT CO	31.92	992.07
06/27/19	03-00575526	ICH9	R9	SPECIAL WASTE-OUT CO	27.16	844.13
06/27/19	03-00575545	ICH29	29	SPECIAL WASTE-OUT CO	27.36	850.35
06/27/19	03-00575546	ICH28	028	SPECIAL WASTE-OUT CO	30.89	960.06
06/27/19	03-00575549	ICH08	08	SPECIAL WASTE-OUT CO	34.18	1062.31
06/27/19	03-00575561	ICH325	325	SPECIAL WASTE-OUT CO	33.66	1046.15
06/27/19	03-00575562	ICH42	42	SPECIAL WASTE-OUT CO	24.91	774.20
06/27/19	03-00575571	ICH32	32	SPECIAL WASTE-OUT CO	27.29	848.17
06/27/19	03-00575572	ICH33	33	SPECIAL WASTE-OUT CO	28.22	877.08

PCRCO, LLC DBA LRI-304TH ST
 17925 Meridian St E
 Puyallup, WA 98375
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INVOICE

Date due 08/01/19

DATE	PAGE
06/30/19	21
INVOICE NUMBER	
8090	

AMOUNT DUE	AMOUNT PAID
569066.24	\$

ICHIJO USA CO., LTD.
 YOSHIKO/TINA
 1406 140TH PL NE STE 104
 BELLEVUE WA 98007

ACCOUNT NO.
920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
06/27/19	03-00575586	ICH60	60	SPECIAL WASTE-OUT CO	25.93	805.90
06/27/19	03-00575589	ICH25	25	SPECIAL WASTE-OUT CO	27.51	855.01
06/27/19	03-00575590	ICH13	13	SPECIAL WASTE-OUT CO	27.90	867.13
06/27/19	03-00575591	ICH8	R8	SPECIAL WASTE-OUT CO	27.49	854.39
06/27/19	03-00575595	ICH9	R9	SPECIAL WASTE-OUT CO	28.46	884.54
06/27/19	03-00575596	ICH27	27	SPECIAL WASTE-OUT CO	27.79	863.71
06/27/19	03-00575603	ICH08	08	SPECIAL WASTE-OUT CO	28.62	889.51
06/27/19	03-00575612	ICH325	325	SPECIAL WASTE-OUT CO	29.19	907.23
06/27/19	03-00575620	ICH29	29	SPECIAL WASTE-OUT CO	28.34	880.81
06/27/19	03-00575623	ICH28	28	SPECIAL WASTE-OUT CO	28.01	870.55
06/27/19	03-00575632	ICH42	42	SPECIAL WASTE-OUT CO	28.67	891.06
06/27/19	03-00575636	ICH32	32	SPECIAL WASTE-OUT CO	28.19	876.15
06/27/19	03-00575641	ICH33	33	SPECIAL WASTE-OUT CO	28.64	890.13
06/27/19	03-00575654	ICH25	25	SPECIAL WASTE-OUT CO	29.54	918.10
06/27/19	03-00575657	ICH60	60	SPECIAL WASTE-OUT CO	28.37	881.74
06/27/19	03-00575663	ICH13	13	SPECIAL WASTE-OUT CO	29.66	921.83
06/27/19	03-00575667	ICH8	R8	SPECIAL WASTE-OUT CO	29.95	930.85
06/27/19	03-00575673	ICH9	9	SPECIAL WASTE-OUT CO	27.77	863.09
06/27/19	03-00575676	ICH27	27	SPECIAL WASTE-OUT CO	29.56	918.72
06/27/19	03-00575683	ICH08	08	SPECIAL WASTE-OUT CO	31.67	984.30
06/27/19	03-00575691	ICH325	325	SPECIAL WASTE-OUT CO	27.57	856.88
06/27/19	03-00575697	ICH29	29	SPECIAL WASTE-OUT CO	27.29	848.17
06/27/19	03-00575702	ICH28	28	SPECIAL WASTE-OUT CO	30.41	945.14
06/27/19	03-00575708	ICH32	32	SPECIAL WASTE-OUT CO	28.14	874.59
06/27/19	03-00575709	ICH42	42	SPECIAL WASTE-OUT CO	32.99	1025.33
06/27/19	03-00575712	ICH33	33	SPECIAL WASTE-OUT CO	27.30	848.48
06/27/19	03-00575717	ICH25	25	SPECIAL WASTE-OUT CO	26.96	837.92
06/27/19	03-00575719	ICH60	60	SPECIAL WASTE-OUT CO	27.15	843.82
06/27/19	03-00575721	ICH8	R8	SPECIAL WASTE-OUT CO	26.17	813.36
06/27/19	03-00575725	ICH13	13	SPECIAL WASTE-OUT CO	27.63	858.74

PCRCO, LLC DBA LRI-304TH ST
17925 Meridian St E
Puyallup, WA 98375
(253) 847-7555

INVOICE

Date due 08/01/19

DATE	PAGE
06/30/19	22
INVOICE NUMBER	
8090	

ICHIJO USA CO., LTD.
YOSHIKO/TINA
1406 140TH PL NE STE 104
BELLEVUE WA 98007

AMOUNT DUE	AMOUNT PAID
569066.24	\$

ACCOUNT NO.
920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
06/27/19	03-00575727	ICH9	R9	SPECIAL WASTE-OUT CO	28.23	877.39
06/27/19	03-00575733	ICH325	325	SPECIAL WASTE-OUT CO	30.36	943.59
06/27/19	03-00575744	ICH08	08	SPECIAL WASTE-OUT CO	31.03	964.41
06/27/19	03-00575747	ICH29	29	SPECIAL WASTE-OUT CO	27.16	844.13
06/27/19	03-00575749	ICH28	28	SPECIAL WASTE-OUT CO	25.88	804.35
06/27/19	03-00575760	ICH33	33	SPECIAL WASTE-OUT CO	29.53	917.79
06/27/19	03-00575762	ICH25	25	SPECIAL WASTE-OUT CO	25.08	779.49
06/27/19	03-00575763	ICH60	60	SPECIAL WASTE-OUT CO	27.04	840.40
06/27/19	03-00575766	ICH8	8	SPECIAL WASTE-OUT CO	28.27	878.63
06/27/19	03-00575769	ICH9	9	SPECIAL WASTE-OUT CO	27.14	843.51
06/27/19	03-00575771	ICH13	13	SPECIAL WASTE-OUT CO	29.29	910.33
06/27/19	03-00575772	ICH325	325	SPECIAL WASTE-OUT CO	29.86	928.05
06/28/19	03-00575801	ICH60	60	SPECIAL WASTE-OUT CO	28.41	882.98
06/28/19	03-00575803	ICH25	25	SPECIAL WASTE-OUT CO	26.86	834.81
06/28/19	03-00575832	ICH43	43	SPECIAL WASTE-OUT CO	29.88	928.67
06/28/19	03-00575849	ICH42	42	SPECIAL WASTE-OUT CO	29.48	916.24
06/28/19	03-00575857	ICH60	60	SPECIAL WASTE-OUT CO	28.99	901.01
06/28/19	03-00575862	ICH25	25	SPECIAL WASTE-OUT CO	31.02	964.10
06/28/19	03-00575868	ICH43	43	SPECIAL WASTE-OUT CO	31.16	968.45
06/28/19	03-00575897	ICH42	42	SPECIAL WASTE-OUT CO	28.04	871.48
06/28/19	03-00575916	ICH60	60	SPECIAL WASTE-OUT CO	28.56	887.64
06/28/19	03-00575919	ICH25	25	SPECIAL WASTE-OUT CO	27.32	849.11
06/28/19	03-00575922	ICH43	43	SPECIAL WASTE-OUT CO	33.10	1028.75
06/28/19	03-00575935	ICH42	42	SPECIAL WASTE-OUT CO	23.64	734.73
	Net weight	18187.34		Invoice total		569066.24

24

21x30 = 630

24

654 LARDS

PCRCO, LLC DBA LRI-304TH ST
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INVOICE

Printed 10/01/19

DATE	PAGE
09/30/19	1
INVOICE NUMBER	
8296	

ICHIJO USA CO., LTD.
 YOSHIKO/TINA
 1406 140TH PL NE STE 104
 BELLEVUE WA 98007

AMOUNT DUE	AMOUNT PAID
52819.25	\$

ACCOUNT NO.
920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
09/16/19	03-00589457		TRISTAR 7	SPECIAL WASTE-OUT CO	27.27	847.55
09/16/19	03-00589459		48	SPECIAL WASTE-OUT CO	26.75	831.39
09/16/19	03-00589487		TRISTAR 7	SPECIAL WASTE-OUT CO	29.34	911.89
09/16/19	03-00589493		48	SPECIAL WASTE-OUT CO	29.70	923.08
09/16/19	03-00589535		TRISTAR 7	SPECIAL WASTE-OUT CO	26.57	825.80
09/16/19	03-00589546		48	SPECIAL WASTE-OUT CO	33.10	1028.75
09/16/19	03-00589571		TRISTAR 7	SPECIAL WASTE-OUT CO	31.39	975.60
09/16/19	03-00589586		48	SPECIAL WASTE-OUT CO	30.98	962.86
09/16/19	03-00589604		TRISTAR 7	SPECIAL WASTE-OUT CO	31.19	969.39
09/17/19	03-00589627		7	SPECIAL WASTE-OUT CO	31.78	987.72
09/17/19	03-00589636		43	SPECIAL WASTE-OUT CO	26.32	818.03
09/17/19	03-00589661		36	SPECIAL WASTE-OUT CO	29.94	930.54
09/17/19	03-00589686	ICH7	7	SPECIAL WASTE-OUT CO	29.43	914.68
09/17/19	03-00589698	ICH43	43	SPECIAL WASTE-OUT CO	32.20	1000.78
09/17/19	03-00589699	ICH36	36	SPECIAL WASTE-OUT CO	35.72	1110.18
09/17/19	03-00589742	ICH7	7	SPECIAL WASTE-OUT CO	33.87	1052.68
09/17/19	03-00589753	ICH36	36	SPECIAL WASTE-OUT CO	31.39	975.60
09/17/19	03-00589762	ICH43	43	SPECIAL WASTE-OUT CO	29.12	905.05
09/17/19	03-00589778	ICH7	7	SPECIAL WASTE-OUT CO	32.70	1016.32
09/17/19	03-00589785	ICH36	36	SPECIAL WASTE-OUT CO	26.47	822.69
09/17/19	03-00589801	ICH43	43	SPECIAL WASTE-OUT CO	29.24	908.78
09/17/19	03-00589828	ICH7	7	SPECIAL WASTE-OUT CO	24.78	770.16
09/17/19	03-00589830	ICH36	36	SPECIAL WASTE-OUT CO	27.35	850.04
09/18/19	03-00589861	ICH7	TERRY	SPECIAL WASTE-OUT CO	21.86	679.41
09/18/19	03-00589874	ICH36	36	SPECIAL WASTE-OUT CO	24.81	771.09
09/18/19	03-00589915	ICH36	36	SPECIAL WASTE-OUT CO	29.41	914.06
09/18/19	03-00589923	ICH7	TERRY	SPECIAL WASTE-OUT CO	25.63	796.58
09/18/19	03-00589942	ICH	42	SPECIAL WASTE-OUT CO	25.76	800.62
09/18/19	03-00589979	ICH36	36	SPECIAL WASTE-OUT CO	27.97	869.31
09/18/19	03-00589983	ICH7	TERRY	SPECIAL WASTE-OUT CO	28.72	892.62

PCRCO, LLC DBA LRI-304TH ST
 17925 Meridian St E
 Puyallup, WA 98375
 (253) 847-7555

INVOICE

Printed 10/01/19

DATE	PAGE
09/30/19	2
INVOICE NUMBER	
8296	

ICHIJO USA CO., LTD.
 YOSHIKO/TINA
 1406 140TH PL NE STE 104
 BELLEVUE WA 98007

AMOUNT DUE	AMOUNT PAID
52819.25	\$

ACCOUNT NO.
920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
09/18/19	03-00589984	ICH42	42	SPECIAL WASTE-OUT CO	25.69	798.45
09/18/19	03-00590024	ICH36	36	SPECIAL WASTE-OUT CO	27.16	844.13
09/18/19	03-00590026	ICH7	TERRY	SPECIAL WASTE-OUT CO	24.94	775.14
09/18/19	03-00590033	ICH42	42	SPECIAL WASTE-OUT CO	26.53	824.55
09/19/19	03-00590072		7	SPECIAL WASTE-OUT CO	27.25	846.93
09/19/19	03-00590081	ICH36	36	SPECIAL WASTE-OUT CO	28.28	878.94
09/19/19	03-00590123	ICH7	7	SPECIAL WASTE-OUT CO	30.13	936.44
09/19/19	03-00590148	ICH36	36	SPECIAL WASTE-OUT CO	27.83	864.96
09/19/19	03-00590183	ICH7	7	SPECIAL WASTE-OUT CO	27.45	853.15
09/19/19	03-00590199	ICH36	36	SPECIAL WASTE-OUT CO	33.31	1035.27
09/19/19	03-00590221	ICH7	7	SPECIAL WASTE-OUT CO	32.44	1008.24
09/19/19	03-00590243	ICH36	36	SPECIAL WASTE-OUT CO	33.86	1052.37
09/19/19	03-00590256	ICH7	7	SPECIAL WASTE-OUT CO	29.35	912.20
09/20/19	03-00590298	ICH36	36	SPECIAL WASTE-OUT CO	30.11	935.82
09/20/19	03-00590307	ICH7	TERRY	SPECIAL WASTE-OUT CO	29.20	907.54
09/20/19	03-00590346	ICH36	36	SPECIAL WASTE-OUT CO	32.31	1004.19
09/20/19	03-00590352	ICH7	7	SPECIAL WASTE-OUT CO	32.67	1015.38
09/20/19	03-00590400	ICH36	36	SPECIAL WASTE-OUT CO	27.21	845.69
09/20/19	03-00590410	ICH7	7	SPECIAL WASTE-OUT CO	28.68	891.37
09/20/19	03-00590437	ICH36	36	SPECIAL WASTE-OUT CO	31.22	970.32
09/20/19	03-00590449	ICH7	7	SPECIAL WASTE-OUT CO	24.07	748.10
09/23/19	03-00590559		30	SPECIAL WASTE-OUT CO	26.27	816.47
09/23/19	03-00590596	ICH30	30	SPECIAL WASTE-OUT CO	28.77	894.17
09/23/19	03-00590648	ICH30	30	SPECIAL WASTE-OUT CO	29.59	919.66
09/23/19	03-00590683	ICH30	30	SPECIAL WASTE-OUT CO	31.31	973.11
09/24/19	03-00590752	ICH31	31	SPECIAL WASTE-OUT CO	25.49	792.23
09/24/19	03-00590807	ICH31	31	SPECIAL WASTE-OUT CO	31.11	966.90
09/24/19	03-00590850		31	SPECIAL WASTE-OUT CO	25.06	778.86
09/24/19	03-00590902	ICH31	31	SPECIAL WASTE-OUT CO	21.41	665.42
	Net weight	1699.46		Invoice total		52819.25

PCRCO, LLC DBA LRI-304TH ST
 17925 Meridian St E
 Puyallup, WA 98375
 (253) 847-7555

INVOICE

Printed 11/01/19

DATE	PAGE
10/31/19	1
INVOICE NUMBER	
8360	

ICHIJO USA CO., LTD.
 YOSHIKO/TINA
 1406 140TH PL NE STE 104
 BELLEVUE WA 98007

AMOUNT DUE	AMOUNT PAID
30816.77	\$

ACCOUNT NO.
920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
10/25/19	03-00595999		44	SPECIAL WASTE-OUT CO	28.67	891.06
10/25/19	03-00596011		48	SPECIAL WASTE-OUT CO	27.39	851.28
10/25/19	03-00596048	ICH44	44	SPECIAL WASTE-OUT CO	31.14	967.83
10/25/19	03-00596060	ICH48	48	SPECIAL WASTE-OUT CO	33.47	1040.25
10/25/19	03-00596103	ICH44	44	SPECIAL WASTE-OUT CO	27.89	866.82
10/25/19	03-00596117	ICH48	48	SPECIAL WASTE-OUT CO	32.18	1000.15
10/25/19	03-00596143	ICH44	44	SPECIAL WASTE-OUT CO	34.15	1061.38
10/25/19	03-00596149	ICH48	48	SPECIAL WASTE-OUT CO	33.23	1032.79
10/28/19	03-00596279	ICH45	45	SPECIAL WASTE-OUT CO	25.59	795.34
10/28/19	03-00596280	ICH46	46	SPECIAL WASTE-OUT CO	29.82	926.81
10/28/19	03-00596313	ICH46	46	SPECIAL WASTE-OUT CO	29.42	914.37
10/28/19	03-00596316	ICH45	45	SPECIAL WASTE-OUT CO	26.94	837.30
10/28/19	03-00596364	ICH46	46	SPECIAL WASTE-OUT CO	30.46	946.70
10/28/19	03-00596368	ICH45	45	SPECIAL WASTE-OUT CO	30.73	955.09
10/28/19	03-00596411	ICH46	46	SPECIAL WASTE-OUT CO	24.42	758.97
10/28/19	03-00596414	ICH45	45	SPECIAL WASTE-OUT CO	24.25	753.69
10/29/19	03-00596462	ICH7	TERRY	SPECIAL WASTE-OUT CO	28.98	900.70
10/29/19	03-00596515	ICH7	TERRY	SPECIAL WASTE-OUT CO	32.05	996.11
10/29/19	03-00596569	ICH	7	SPECIAL WASTE-OUT CO	32.21	1001.09
10/29/19	03-00596623	ICH7	7	SPECIAL WASTE-OUT CO	32.96	1024.40
10/30/19	03-00596677	ICH31	31	SPECIAL WASTE-OUT CO	31.85	989.90
10/30/19	03-00596743	ICH31	31	SPECIAL WASTE-OUT CO	28.44	883.92
10/30/19	03-00596803	ICH31	31	SPECIAL WASTE-OUT CO	31.61	982.44
10/30/19	03-00596838	ICH31	31	SPECIAL WASTE-OUT CO	36.01	1119.19
10/31/19	03-00596900		46	SPECIAL WASTE-OUT CO	30.73	955.09
10/31/19	03-00596910		31	SPECIAL WASTE-OUT CO	34.97	1086.87
10/31/19	03-00596947		46	SPECIAL WASTE-OUT CO	33.72	1048.02
10/31/19	03-00596963		31	SPECIAL WASTE-OUT CO	35.07	1089.98
10/31/19	03-00597015		46	SPECIAL WASTE-OUT CO	33.12	1029.37
10/31/19	03-00597025		31	SPECIAL WASTE-OUT CO	34.24	1064.18

PCRCO, LLC DBA LRI-304TH ST
17925 Meridian St E
Puyallup, WA 98375
(253) 847-7555

INVOICE

Printed 11/01/19

DATE	PAGE
10/31/19	2
INVOICE NUMBER	
8360	

AMOUNT DUE	AMOUNT PAID
30816.77	\$

ICHIJO USA CO., LTD.
YOSHIKO/TINA
1406 140TH PL NE STE 104
BELLEVUE WA 98007

ACCOUNT NO.
920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
10/31/19	03-00597072		46	SPECIAL WASTE-OUT CO	30.54	949.18
10/31/19	03-00597078		31	SPECIAL WASTE-OUT CO	35.28	1096.50
	Net weight	991.53		Invoice total		30816.77

PCRCO, LLC DBA LRI-304TH ST
 17925 Meridian St E
 Puyallup, WA 98375
 (253) 847-7555

INVOICE

Date due 10/01/19

DATE	PAGE
08/31/19	1
INVOICE NUMBER	
8226	

AMOUNT DUE	AMOUNT PAID
253770.02	\$

ICHIJO USA CO., LTD.
 YOSHIKO/TINA
 1406 140TH PL NE STE 104
 BELLEVUE WA 98007

ACCOUNT NO.
920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
08/01/19	03-00581984		46	SPECIAL WASTE-OUT CO	35.10	1090.91
08/01/19	03-00581990		35	SPECIAL WASTE-OUT CO	32.85	1020.98
08/01/19	03-00581995		INTEGRITY	SPECIAL WASTE-OUT CO	29.97	931.47
08/01/19	03-00582010		325	SPECIAL WASTE-OUT CO	34.07	1058.90
08/01/19	03-00582062		35	SPECIAL WASTE-OUT CO	22.84	709.87
08/01/19	03-00582063		46	SPECIAL WASTE-OUT CO	19.98	620.98
08/01/19	03-00582065		INTEGRITY	SPECIAL WASTE-OUT CO	24.60	764.57
08/01/19	03-00582067		325	SPECIAL WASTE-OUT CO	26.49	823.31
08/01/19	03-00582108		35	SPECIAL WASTE-OUT CO	25.15	781.66
08/01/19	03-00582113		46	SPECIAL WASTE-OUT CO	24.85	772.34
08/01/19	03-00582123		325	SPECIAL WASTE-OUT CO	24.25	753.69
08/01/19	03-00582135		INTEGRITY	SPECIAL WASTE-OUT CO	25.47	791.61
08/01/19	03-00582176		35	SPECIAL WASTE-OUT CO	22.30	693.08
08/01/19	03-00582180		46	SPECIAL WASTE-OUT CO	20.76	645.22
08/01/19	03-00582185		325	SPECIAL WASTE-OUT CO	27.03	840.09
08/01/19	03-00582190		INTEGRITY	SPECIAL WASTE-OUT CO	27.78	863.40
08/01/19	03-00582229		35	SPECIAL WASTE-OUT CO	27.66	859.67
08/01/19	03-00582230		46	SPECIAL WASTE-OUT CO	28.26	878.32
08/01/19	03-00582236		325	SPECIAL WASTE-OUT CO	27.26	847.24
08/01/19	03-00582245		INTEGRITY	SPECIAL WASTE-OUT CO	32.70	1016.32
08/02/19	03-00582274		35	SPECIAL WASTE-OUT CO	26.91	836.36
08/02/19	03-00582280		01 INTEGRI	SPECIAL WASTE-OUT CO	30.39	944.52
08/02/19	03-00582283		31	SPECIAL WASTE-OUT CO	21.48	667.60
08/02/19	03-00582284		325	SPECIAL WASTE-OUT CO	24.91	774.20
08/02/19	03-00582301		44	SPECIAL WASTE-OUT CO	23.29	723.85
08/02/19	03-00582340		35	SPECIAL WASTE-OUT CO	26.12	811.81
08/02/19	03-00582342		1	SPECIAL WASTE-OUT CO	21.86	679.41
08/02/19	03-00582347		31	SPECIAL WASTE-OUT CO	28.33	880.50
08/02/19	03-00582350		325	SPECIAL WASTE-OUT CO	30.17	937.68
08/02/19	03-00582361		44	SPECIAL WASTE-OUT CO	28.16	875.21

PCRCO, LLC DBA LRI-304TH ST
 17925 Meridian St E
 Puyallup, WA 98375
 (253) 847-7555

INVOICE

Date due 10/01/19

DATE	PAGE
08/31/19	2
INVOICE NUMBER	
8226	

AMOUNT DUE	AMOUNT PAID
253770.02	\$

ICHIJO USA CO., LTD.
 YOSHIKO/TINA
 1406 140TH PL NE STE 104
 BELLEVUE WA 98007

ACCOUNT NO.
920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
08/02/19	03-00582387	ICH44	35	SPECIAL WASTE-OUT CO	25.52	793.16
08/02/19	03-00582393		01	SPECIAL WASTE-OUT CO	27.79	863.71
08/02/19	03-00582396		31	SPECIAL WASTE-OUT CO	26.92	836.67
08/02/19	03-00582401		325	SPECIAL WASTE-OUT CO	31.66	983.99
08/02/19	03-00582430		44	SPECIAL WASTE-OUT CO	33.59	1043.98
08/02/19	03-00582442		35	SPECIAL WASTE-OUT CO	30.70	954.16
08/02/19	03-00582447		1	SPECIAL WASTE-OUT CO	30.89	960.06
08/02/19	03-00582448		31	SPECIAL WASTE-OUT CO	23.85	741.26
08/02/19	03-00582454		325	SPECIAL WASTE-OUT CO	32.64	1014.45
08/02/19	03-00582481		44	SPECIAL WASTE-OUT CO	30.85	958.82
08/02/19	03-00582491		35	SPECIAL WASTE-OUT CO	24.19	751.83
08/02/19	03-00582501		1	SPECIAL WASTE-OUT CO	28.22	877.08
08/02/19	03-00582506		31	SPECIAL WASTE-OUT CO	31.99	994.25
08/02/19	03-00582507		325	SPECIAL WASTE-OUT CO	29.02	901.94
08/02/19	03-00582520		44	SPECIAL WASTE-OUT CO	35.89	1115.46
08/05/19	03-00582621		35	SPECIAL WASTE-OUT CO	31.75	986.79
08/05/19	03-00582632		34	SPECIAL WASTE-OUT CO	32.47	1009.17
08/05/19	03-00582636		325	SPECIAL WASTE-OUT CO	32.82	1020.05
08/05/19	03-00582645		31	SPECIAL WASTE-OUT CO	28.33	880.50
08/05/19	03-00582654		44	SPECIAL WASTE-OUT CO	19.31	600.15
08/05/19	03-00582703		35	SPECIAL WASTE-OUT CO	19.23	597.67
08/05/19	03-00582708		34	SPECIAL WASTE-OUT CO	21.35	663.56
08/05/19	03-00582711		325	SPECIAL WASTE-OUT CO	24.95	775.45
08/05/19	03-00582714		31	SPECIAL WASTE-OUT CO	24.08	748.41
08/05/19	03-00582722		44	SPECIAL WASTE-OUT CO	21.68	673.81
08/05/19	03-00582771		35	SPECIAL WASTE-OUT CO	23.52	731.00
08/05/19	03-00582777		34	SPECIAL WASTE-OUT CO	28.78	894.48
08/05/19	03-00582779		325	SPECIAL WASTE-OUT CO	30.42	945.45
08/05/19	03-00582786		31	SPECIAL WASTE-OUT CO	22.21	690.29
08/05/19	03-00582790		44	SPECIAL WASTE-OUT CO	24.31	755.55

PCRCO, LLC DBA LRI-304TH ST
 17925 Meridian St E
 Puyallup, WA 98375
 (253) 847-7555

INVOICE

Date due 10/01/19

DATE	PAGE
08/31/19	3
INVOICE NUMBER	
8226	

ICHIJO USA CO., LTD.
 YOSHIKO/TINA
 1406 140TH PL NE STE 104
 BELLEVUE WA 98007

AMOUNT DUE	AMOUNT PAID
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ACCOUNT NO.
920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
08/05/19	03-00582835		35	SPECIAL WASTE-OUT CO	28.43	883.60
08/05/19	03-00582841		34	SPECIAL WASTE-OUT CO	20.98	652.06
08/05/19	03-00582843		325	SPECIAL WASTE-OUT CO	22.35	694.64
08/05/19	03-00582846		31	SPECIAL WASTE-OUT CO	20.36	632.79
08/05/19	03-00582855		44	SPECIAL WASTE-OUT CO	22.41	696.50
08/05/19	03-00582887		35	SPECIAL WASTE-OUT CO	29.19	907.23
08/05/19	03-00582892		34	SPECIAL WASTE-OUT CO	28.56	887.64
08/05/19	03-00582895		325	SPECIAL WASTE-OUT CO	29.49	916.55
08/05/19	03-00582900		31	SPECIAL WASTE-OUT CO	23.86	741.57
08/06/19	03-00582936	ICH35	35	SPECIAL WASTE-OUT CO	32.23	1001.71
08/06/19	03-00582937	ICH31	31	SPECIAL WASTE-OUT CO	31.86	990.21
08/06/19	03-00582939	ICH325	325	SPECIAL WASTE-OUT CO	31.32	973.43
08/06/19	03-00582951	ICH44	44	SPECIAL WASTE-OUT CO	29.45	915.31
08/06/19	03-00582975	ICH34	34	SPECIAL WASTE-OUT CO	30.46	946.70
08/06/19	03-00582998	ICH31	31	SPECIAL WASTE-OUT CO	29.53	917.79
08/06/19	03-00583003	ICH35	35	SPECIAL WASTE-OUT CO	29.56	918.72
08/06/19	03-00583008	ICH325	325	SPECIAL WASTE-OUT CO	25.94	806.22
08/06/19	03-00583019	ICH44	44	SPECIAL WASTE-OUT CO	24.50	761.46
08/06/19	03-00583034	ICH34	34	SPECIAL WASTE-OUT CO	30.87	959.44
08/06/19	03-00583052	ICH31	31	SPECIAL WASTE-OUT CO	20.93	650.50
08/06/19	03-00583062	ICH35	35	SPECIAL WASTE-OUT CO	26.39	820.20
08/06/19	03-00583067	ICH325	325	SPECIAL WASTE-OUT CO	31.98	993.94
08/06/19	03-00583086	ICH44	44	SPECIAL WASTE-OUT CO	31.58	981.51
08/06/19	03-00583103	ICH34	34	SPECIAL WASTE-OUT CO	31.57	981.20
08/06/19	03-00583128	ICH31	31	SPECIAL WASTE-OUT CO	30.42	945.45
08/06/19	03-00583133	ICH35	35	SPECIAL WASTE-OUT CO	30.95	961.93
08/06/19	03-00583142	ICH325	325	SPECIAL WASTE-OUT CO	31.55	980.57
08/06/19	03-00583147	ICH44	44	SPECIAL WASTE-OUT CO	32.37	1006.06
08/06/19	03-00583163	ICH34	34	SPECIAL WASTE-OUT CO	35.76	1111.42
08/06/19	03-00583186	ICH35	35	SPECIAL WASTE-OUT CO	30.86	959.13

PCRCD, LLC DBA LRI-304TH ST
 17925 Meridian St E
 Puyallup, WA 98375
 (253) 847-7555

INVOICE

Date due 10/01/19

DATE	PAGE
08/31/19	4
INVOICE NUMBER	
8226	

ICHIJO USA CO., LTD.
 YOSHIKO/TINA
 1406 140TH PL NE STE 104
 BELLEVUE WA 98007

AMOUNT DUE	AMOUNT PAID
253770.02	\$

ACCOUNT NO.
920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
08/06/19	03-00583189	ICH31	31	SPECIAL WASTE-OUT CO	30.21	938.93
08/06/19	03-00583192	ICH325	325	SPECIAL WASTE-OUT CO	32.05	996.11
08/06/19	03-00583203	ICH44	44	SPECIAL WASTE-OUT CO	30.29	941.41
08/07/19	03-00583228	ICH31	31	SPECIAL WASTE-OUT CO	30.27	940.79
08/07/19	03-00583234	ICH34	34	SPECIAL WASTE-OUT CO	30.06	934.26
08/07/19	03-00583235	ICH35	35	SPECIAL WASTE-OUT CO	29.42	914.37
08/07/19	03-00583240	ICH325	325	SPECIAL WASTE-OUT CO	25.88	804.35
08/07/19	03-00583276	ICH44	44	SPECIAL WASTE-OUT CO	18.94	588.66
08/07/19	03-00583288	ICH31	31	SPECIAL WASTE-OUT CO	22.15	688.42
08/07/19	03-00583290	ICH35	35	SPECIAL WASTE-OUT CO	24.02	746.54
08/07/19	03-00583292	ICH34	34	SPECIAL WASTE-OUT CO	24.00	745.92
08/07/19	03-00583293	ICH325	325	SPECIAL WASTE-OUT CO	18.30	568.76
08/07/19	03-00583308	ICH44	44	SPECIAL WASTE-OUT CO	16.39	509.40
08/07/19	03-00583333	ICH31	31	SPECIAL WASTE-OUT CO	21.32	662.63
08/07/19	03-00583340		35	SPECIAL WASTE-OUT CO	21.14	657.03
08/07/19	03-00583348	ICH	34	SPECIAL WASTE-OUT CO	22.40	696.19
08/07/19	03-00583350	ICH1	325	SPECIAL WASTE-OUT CO	23.42	727.89
08/07/19	03-00583367		44	SPECIAL WASTE-OUT CO	18.90	587.41
08/07/19	03-00583390		31	SPECIAL WASTE-OUT CO	21.43	666.04
08/07/19	03-00583394		35	SPECIAL WASTE-OUT CO	25.10	780.11
08/07/19	03-00583398		34	SPECIAL WASTE-OUT CO	21.45	666.67
08/07/19	03-00583405	ICH325	325	SPECIAL WASTE-OUT CO	17.26	536.44
08/07/19	03-00583417	ICH60	60	SPECIAL WASTE-OUT CO	17.48	543.28
08/07/19	03-00583427		31	SPECIAL WASTE-OUT CO	20.96	651.44
08/07/19	03-00583430	ICH35	35	SPECIAL WASTE-OUT CO	21.90	680.65
08/07/19	03-00583431	ICH34	34	SPECIAL WASTE-OUT CO	17.90	556.33
08/07/19	03-00583434	ICH325	325	SPECIAL WASTE-OUT CO	15.52	482.36
08/08/19	03-00583469		31	SPECIAL WASTE-OUT CO	21.22	659.52
08/08/19	03-00583471		60	SPECIAL WASTE-OUT CO	17.78	552.60
08/08/19	03-00583490		34	SPECIAL WASTE-OUT CO	31.81	988.65

PCRCO, LLC DBA LRI-304TH ST
 17925 Meridian St E
 Puyallup, WA 98375
 (253) 847-7555

INVOICE

Date due 10/01/19

DATE	PAGE
08/31/19	5
INVOICE NUMBER	
8226	

ICHIJO USA CO., LTD.
 YOSHIKO/TINA
 1406 140TH PL NE STE 104
 BELLEVUE WA 98007

AMOUNT DUE	AMOUNT PAID
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ACCOUNT NO.
920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
08/08/19	03-00583491		36	SPECIAL WASTE-OUT CO	29.77	925.25
08/08/19	03-00583493		325	SPECIAL WASTE-OUT CO	32.35	1005.44
08/08/19	03-00583515		31 OLSON	SPECIAL WASTE-OUT CO	27.39	851.28
08/08/19	03-00583519		60 COKAMAR	SPECIAL WASTE-OUT CO	26.21	814.61
08/08/19	03-00583533		34	SPECIAL WASTE-OUT CO	33.16	1030.61
08/08/19	03-00583534		325	SPECIAL WASTE-OUT CO	26.22	814.92
08/08/19	03-00583538		36	SPECIAL WASTE-OUT CO	28.03	871.17
08/08/19	03-00583558		31	SPECIAL WASTE-OUT CO	27.77	863.09
08/08/19	03-00583561		60	SPECIAL WASTE-OUT CO	24.19	751.83
08/08/19	03-00583578		34	SPECIAL WASTE-OUT CO	28.80	895.10
08/08/19	03-00583580		325	SPECIAL WASTE-OUT CO	25.80	801.86
08/08/19	03-00583586		36	SPECIAL WASTE-OUT CO	24.21	752.45
08/08/19	03-00583608		31	SPECIAL WASTE-OUT CO	23.88	742.19
08/08/19	03-00583612		60	SPECIAL WASTE-OUT CO	25.89	804.66
08/08/19	03-00583632		34	SPECIAL WASTE-OUT CO	27.85	865.58
08/08/19	03-00583634		325	SPECIAL WASTE-OUT CO	27.51	855.01
08/08/19	03-00583636		36	SPECIAL WASTE-OUT CO	27.27	847.55
08/08/19	03-00583646		31	SPECIAL WASTE-OUT CO	27.67	859.98
08/08/19	03-00583663		34	SPECIAL WASTE-OUT CO	27.58	857.19
08/08/19	03-00583668		36	SPECIAL WASTE-OUT CO	25.98	807.46
08/08/19	03-00583670		325	SPECIAL WASTE-OUT CO	25.91	805.28
08/09/19	03-00583693	ICH60	60	SPECIAL WASTE-OUT CO	29.98	931.78
08/09/19	03-00583703	ICH34	34	SPECIAL WASTE-OUT CO	27.77	863.09
08/09/19	03-00583705	ICH36	36	SPECIAL WASTE-OUT CO	32.14	998.91
08/09/19	03-00583716	ICH44	44	SPECIAL WASTE-OUT CO	29.15	905.98
08/09/19	03-00583721	ICH325	325	SPECIAL WASTE-OUT CO	28.17	875.52
08/09/19	03-00583760	ICH60	60	SPECIAL WASTE-OUT CO	28.54	887.02
08/09/19	03-00583763	ICH34	34	SPECIAL WASTE-OUT CO	31.67	984.30
08/09/19	03-00583765	ICH36	36	SPECIAL WASTE-OUT CO	30.25	940.17
08/09/19	03-00583768	ICH325	325	SPECIAL WASTE-OUT CO	29.97	931.47

PCRCD, LLC DBA LRI-304TH ST
 17925 Meridian St E
 Puyallup, WA 98375
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INVOICE

Date due 10/01/19

DATE	PAGE
08/31/19	6
INVOICE NUMBER	
8226	

ICHIJO USA CO., LTD.
 YOSHIKO/TINA
 1406 140TH PL NE STE 104
 BELLEVUE WA 98007

AMOUNT DUE	AMOUNT PAID
253770.02	\$

ACCOUNT NO.
920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
08/09/19	03-00583771	ICH44	44	SPECIAL WASTE-OUT CO	26.99	838.85
08/09/19	03-00583781	ICH10	10	SPECIAL WASTE-OUT CO	28.08	872.73
08/09/19	03-00583799	ICH60	60	SPECIAL WASTE-OUT CO	29.28	910.02
08/09/19	03-00583814	ICH34	34	SPECIAL WASTE-OUT CO	32.08	997.05
08/09/19	03-00583815	ICH36	36	SPECIAL WASTE-OUT CO	32.11	997.98
08/09/19	03-00583818	ICH325	JER-BEAR	SPECIAL WASTE-OUT CO	31.49	978.71
08/09/19	03-00583829	ICH44	44	SPECIAL WASTE-OUT CO	28.22	877.08
08/09/19	03-00583838	ICH10	10	SPECIAL WASTE-OUT CO	30.32	942.35
08/09/19	03-00583846	ICH60	60	SPECIAL WASTE-OUT CO	29.52	917.48
08/09/19	03-00583859	ICH34	34	SPECIAL WASTE-OUT CO	31.37	974.98
08/09/19	03-00583860	ICH325	JER-BEAR	SPECIAL WASTE-OUT CO	22.74	706.76
08/09/19	03-00583866	ICH36	36	SPECIAL WASTE-OUT CO	26.13	812.12
08/09/19	03-00583872	ICH44	44	SPECIAL WASTE-OUT CO	28.50	885.78
08/09/19	03-00583880	ICH10	10	SPECIAL WASTE-OUT CO	25.86	803.73
08/09/19	03-00583884	ICH60	60	SPECIAL WASTE-OUT CO	22.98	714.22
08/09/19	03-00583904	ICH34	34	SPECIAL WASTE-OUT CO	31.60	982.13
08/09/19	03-00583908		35	SPECIAL WASTE-OUT CO	29.59	919.66
08/12/19	03-00584002	ICH60	60	SPECIAL WASTE-OUT CO	26.38	819.89
08/12/19	03-00584013	ICH35	35	SPECIAL WASTE-OUT CO	28.62	889.51
08/12/19	03-00584018	ICH34	34	SPECIAL WASTE-OUT CO	35.35	1098.68
08/12/19	03-00584021	ICH36	36	SPECIAL WASTE-OUT CO	31.02	964.10
08/12/19	03-00584031	ICH325	325	SPECIAL WASTE-OUT CO	34.89	1084.38
08/12/19	03-00584045	ICH1	BURNS	SPECIAL WASTE-OUT CO	31.70	985.24
08/12/19	03-00584062	ICH60	60	SPECIAL WASTE-OUT CO	30.80	957.26
08/12/19	03-00584068	ICH35	35	SPECIAL WASTE-OUT CO	30.28	941.10
08/12/19	03-00584077	ICH34	34	SPECIAL WASTE-OUT CO	28.03	871.17
08/12/19	03-00584081	ICH36	36	SPECIAL WASTE-OUT CO	29.40	913.75
08/12/19	03-00584082	ICH325	325	SPECIAL WASTE-OUT CO	25.81	802.17
08/12/19	03-00584095	ICH1	BURNS	SPECIAL WASTE-OUT CO	34.65	1076.92
08/12/19	03-00584112	ICH60	60	SPECIAL WASTE-OUT CO	29.18	906.91

PCRCO, LLC DBA LRI-304TH ST
 17925 Meridian St E
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INVOICE

Date due 10/01/19

DATE	PAGE
08/31/19	7
INVOICE NUMBER	
8226	

ICHIJO USA CO., LTD.
 YOSHIKO/TINA
 1406 140TH PL NE STE 104
 BELLEVUE WA 98007

AMOUNT DUE	AMOUNT PAID
253770.02	\$

ACCOUNT NO.
920

DETACH AND RETURN TOP PORTION WITH REMITTANCE

DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
08/12/19	03-00584126	ICH35	35	SPECIAL WASTE-OUT CO	30.11	935.82
08/12/19	03-00584130	ICH34	34	SPECIAL WASTE-OUT CO	31.97	993.63
08/12/19	03-00584135	ICH36	36	SPECIAL WASTE-OUT CO	28.22	877.08
08/12/19	03-00584139	ICH325	325	SPECIAL WASTE-OUT CO	27.80	864.02
08/12/19	03-00584151	ICH	BURNS	SPECIAL WASTE-OUT CO	29.15	905.98
08/12/19	03-00584155	ICH60	60	SPECIAL WASTE-OUT CO	31.00	963.48
08/12/19	03-00584160	ICH35	35	SPECIAL WASTE-OUT CO	27.97	869.31
08/12/19	03-00584175	ICH34	34	SPECIAL WASTE-OUT CO	30.77	956.33
08/12/19	03-00584180	ICH36	36	SPECIAL WASTE-OUT CO	27.55	856.25
08/12/19	03-00584182	ICH325	325	SPECIAL WASTE-OUT CO	27.00	839.16
08/12/19	03-00584192	ICH	BURNS	SPECIAL WASTE-OUT CO	31.42	976.53
08/12/19	03-00584195	ICH60	60	SPECIAL WASTE-OUT CO	29.01	901.63
08/12/19	03-00584207	ICH35	35	SPECIAL WASTE-OUT CO	26.52	824.24
08/12/19	03-00584216	ICH34	34	SPECIAL WASTE-OUT CO	29.65	921.52
08/12/19	03-00584217	ICH36	36	SPECIAL WASTE-OUT CO	31.17	968.76
08/12/19	03-00584219	ICH325	325	SPECIAL WASTE-OUT CO	29.79	925.87
08/13/19	03-00584252	ICH60	60	SPECIAL WASTE-OUT CO	26.57	825.80
08/13/19	03-00584256	ICH	BURNS	SPECIAL WASTE-OUT CO	28.96	900.08
08/13/19	03-00584257	ICH36	36	SPECIAL WASTE-OUT CO	26.64	827.97
08/13/19	03-00584263	ICH7	07	SPECIAL WASTE-OUT CO	25.55	794.09
08/13/19	03-00584264	ICH325	325	SPECIAL WASTE-OUT CO	28.57	887.96
08/13/19	03-00584301	ICH60	60	SPECIAL WASTE-OUT CO	28.50	885.78
08/13/19	03-00584308	ICH36	36	SPECIAL WASTE-OUT CO	32.05	996.11
08/13/19	03-00584311	ICH	BURNS	SPECIAL WASTE-OUT CO	31.28	972.18
08/13/19	03-00584312	ICH7	07	SPECIAL WASTE-OUT CO	30.41	945.14
08/13/19	03-00584315	ICH325	325	SPECIAL WASTE-OUT CO	34.08	1059.21
08/13/19	03-00584348	ICH60	60	SPECIAL WASTE-OUT CO	32.93	1023.46
08/13/19	03-00584365	ICH	BURNS	SPECIAL WASTE-OUT CO	29.20	907.54
08/13/19	03-00584366	ICH36	36	SPECIAL WASTE-OUT CO	32.16	999.53
08/13/19	03-00584373	ICH7	07	SPECIAL WASTE-OUT CO	31.45	977.47

PCRCO, LLC DBA LRI-304TH ST
 17925 Meridian St E
 Puyallup, WA 98375
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INVOICE

Date due 10/01/19

DATE	PAGE
08/31/19	8
INVOICE NUMBER	
8226	

ICHIJO USA CO., LTD.
 YOSHIKO/TINA
 1406 140TH PL NE STE 104
 BELLEVUE WA 98007

AMOUNT DUE	AMOUNT PAID
253770.02	\$

ACCOUNT NO.
920

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DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
08/13/19	03-00584380	ICH325	325	SPECIAL WASTE-OUT CO	34.64	1076.61
08/13/19	03-00584405	ICH60	60	SPECIAL WASTE-OUT CO	33.24	1033.10
08/13/19	03-00584416	ICH36	36	SPECIAL WASTE-OUT CO	36.63	1138.46
08/13/19	03-00584419	ICH	BURNS	SPECIAL WASTE-OUT CO	35.26	1095.88
08/13/19	03-00584425	ICH7	07	SPECIAL WASTE-OUT CO	39.75	1235.43
08/13/19	03-00584426	ICH325	325	SPECIAL WASTE-OUT CO	32.45	1008.55
08/13/19	03-00584456	ICH36	36	SPECIAL WASTE-OUT CO	25.83	802.80
08/13/19	03-00584460	ICH	BURNS	SPECIAL WASTE-OUT CO	29.47	915.93
08/13/19	03-00584463	ICH7	07	SPECIAL WASTE-OUT CO	23.90	742.81
08/14/19	03-00584488	ICH60	60	SPECIAL WASTE-OUT CO	25.53	793.47
08/14/19	03-00584494	ICH36	36	SPECIAL WASTE-OUT CO	29.00	901.32
08/14/19	03-00584496	ICH35	35	SPECIAL WASTE-OUT CO	27.37	850.66
08/14/19	03-00584507	ICH34	34	SPECIAL WASTE-OUT CO	32.23	1001.71
08/14/19	03-00584510	ICH31	31	SPECIAL WASTE-OUT CO	27.82	864.65
08/14/19	03-00584547		60	SPECIAL WASTE-OUT CO	27.97	869.31
08/14/19	03-00584551	ICH35	35	SPECIAL WASTE-OUT CO	28.38	882.05
08/14/19	03-00584552	ICH36	36	SPECIAL WASTE-OUT CO	30.08	934.89
08/14/19	03-00584556	ICH34	34	SPECIAL WASTE-OUT CO	27.78	863.40
08/14/19	03-00584559	ICH31	31	SPECIAL WASTE-OUT CO	33.15	1030.30
08/14/19	03-00584598	ICH60	60	SPECIAL WASTE-OUT CO	28.74	893.24
08/14/19	03-00584608	ICH35	35	SPECIAL WASTE-OUT CO	31.21	970.01
08/14/19	03-00584613	ICH36	36	SPECIAL WASTE-OUT CO	33.67	1046.46
08/14/19	03-00584622	ICH34	34	SPECIAL WASTE-OUT CO	28.23	877.39
08/14/19	03-00584631	ICH31	31	SPECIAL WASTE-OUT CO	22.52	699.92
08/14/19	03-00584640	ICH60	60	SPECIAL WASTE-OUT CO	25.28	785.70
08/14/19	03-00584651	ICH35	35	SPECIAL WASTE-OUT CO	22.52	699.92
08/14/19	03-00584661		36	SPECIAL WASTE-OUT CO	24.34	756.49
08/14/19	03-00584665	ICH34	34	SPECIAL WASTE-OUT CO	27.18	844.75
08/14/19	03-00584666	ICH31	31	SPECIAL WASTE-OUT CO	27.26	847.24
08/14/19	03-00584680	ICH60	60	SPECIAL WASTE-OUT CO	28.40	882.67

PCRCD, LLC DBA LRI-304TH ST
 17925 Meridian St E
 Puyallup, WA 98375
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INVOICE

Date due 10/01/19

DATE	PAGE
08/31/19	9
INVOICE NUMBER	
8226	

ICHIJO USA CO., LTD.
 YOSHIKO/TINA
 1406 140TH PL NE STE 104
 BELLEVUE WA 98007

AMOUNT DUE	AMOUNT PAID
253770.02	\$

ACCOUNT NO.
920

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DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
08/14/19	03-00584698	ICH35	35	SPECIAL WASTE-OUT CO	31.63	983.06
08/14/19	03-00584702	ICH36	36	SPECIAL WASTE-OUT CO	31.45	977.47
08/14/19	03-00584704	ICH34	34	SPECIAL WASTE-OUT CO	31.87	990.52
08/14/19	03-00584705	ICH31	31	SPECIAL WASTE-OUT CO	30.89	960.06
08/15/19	03-00584725		60	SPECIAL WASTE-OUT CO	29.91	929.60
08/15/19	03-00584739		35	SPECIAL WASTE-OUT CO	28.73	892.93
08/15/19	03-00584745		34	SPECIAL WASTE-OUT CO	26.31	817.71
08/15/19	03-00584748		36	SPECIAL WASTE-OUT CO	31.19	969.39
08/15/19	03-00584749		31	SPECIAL WASTE-OUT CO	29.44	915.00
08/15/19	03-00584757		325	SPECIAL WASTE-OUT CO	29.57	919.04
08/15/19	03-00584796		60	SPECIAL WASTE-OUT CO	31.49	978.71
08/15/19	03-00584801		35	SPECIAL WASTE-OUT CO	30.99	963.17
08/15/19	03-00584806		36	SPECIAL WASTE-OUT CO	29.42	914.37
08/15/19	03-00584809		34	SPECIAL WASTE-OUT CO	26.29	817.09
08/15/19	03-00584815		31	SPECIAL WASTE-OUT CO	23.73	737.53
08/15/19	03-00584819		325	SPECIAL WASTE-OUT CO	28.02	870.86
08/15/19	03-00584838		60	SPECIAL WASTE-OUT CO	31.84	989.59
08/15/19	03-00584863		35	SPECIAL WASTE-OUT CO	30.33	942.66
08/15/19	03-00584874		36	SPECIAL WASTE-OUT CO	32.91	1022.84
08/15/19	03-00584875		34	SPECIAL WASTE-OUT CO	23.67	735.66
08/15/19	03-00584879		31	SPECIAL WASTE-OUT CO	28.32	880.19
08/15/19	03-00584887		325	SPECIAL WASTE-OUT CO	27.69	860.61
08/15/19	03-00584892		60	SPECIAL WASTE-OUT CO	25.18	782.59
08/15/19	03-00584899		35	SPECIAL WASTE-OUT CO	29.97	931.47
08/15/19	03-00584919		36	SPECIAL WASTE-OUT CO	27.80	864.02
08/15/19	03-00584927		34	SPECIAL WASTE-OUT CO	27.73	861.85
08/15/19	03-00584928		31	SPECIAL WASTE-OUT CO	33.27	1034.03
08/15/19	03-00584932		325	SPECIAL WASTE-OUT CO	29.73	924.01
08/15/19	03-00584936		60	SPECIAL WASTE-OUT CO	28.56	887.64
08/15/19	03-00584952		35	SPECIAL WASTE-OUT CO	30.85	958.82

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 17925 Meridian St E
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INVOICE

Date due 10/01/19

DATE	PAGE
08/31/19	10
INVOICE NUMBER	
8226	

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253770.02	\$

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DATE	TICKET	VEHICLE	REFERENCE	DESCRIPTION	QUANTITY	AMOUNT
08/16/19	03-00584988	ICH60	60	SPECIAL WASTE-OUT CO	29.34	911.89
08/16/19	03-00584996	ICH35	35	SPECIAL WASTE-OUT CO	25.68	798.13
08/16/19	03-00585007	ICH325	325	SPECIAL WASTE-OUT CO	26.59	826.42
08/16/19	03-00585009	ICH36	36	SPECIAL WASTE-OUT CO	25.14	781.35
08/16/19	03-00585010	ICH34	34	SPECIAL WASTE-OUT CO	27.81	864.33
08/16/19	03-00585039	ICH60	60	SPECIAL WASTE-OUT CO	30.80	957.26
08/16/19	03-00585043	ICH35	35	SPECIAL WASTE-OUT CO	30.31	942.03
08/16/19	03-00585046	ICH325	325	SPECIAL WASTE-OUT CO	31.10	966.59
08/16/19	03-00585053	ICH34	34	SPECIAL WASTE-OUT CO	27.39	851.28
08/16/19	03-00585056	ICH36	36	SPECIAL WASTE-OUT CO	30.07	934.58
08/16/19	03-00585057	ICH48	48	SPECIAL WASTE-OUT CO	28.59	888.58
08/16/19	03-00585083	ICH60	60	SPECIAL WASTE-OUT CO	31.62	982.75
08/16/19	03-00585096		35	SPECIAL WASTE-OUT CO	30.62	951.67
08/16/19	03-00585098	ICH325	325	SPECIAL WASTE-OUT CO	29.03	902.25
08/16/19	03-00585104	ICH34	34	SPECIAL WASTE-OUT CO	30.23	939.55
08/16/19	03-00585111	ICH48	48	SPECIAL WASTE-OUT CO	31.91	991.76
08/16/19	03-00585112	ICH36	36	SPECIAL WASTE-OUT CO	30.55	949.49
08/16/19	03-00585121	ICH60	60	SPECIAL WASTE-OUT CO	30.64	952.29
08/16/19	03-00585136	ICH35	35	SPECIAL WASTE-OUT CO	29.39	913.44
08/16/19	03-00585138	ICH325	325	SPECIAL WASTE-OUT CO	33.88	1052.99
08/16/19	03-00585142	ICH34	34	SPECIAL WASTE-OUT CO	29.66	921.83
	Net weight	8165.06		Invoice total		253770.02