REMEDIAL INVESTIGATION / FEASIBILITY STUDY AND CLEANUP ACTION PLAN

35P Development
South 35th Street & Pacific Avenue
Tacoma, Washington

Prepared for: Mercy Housing Northwest

Project No. AS220138 • June 19, 2025 FINAL

Aspect
A Geosyntec Company

earth + water

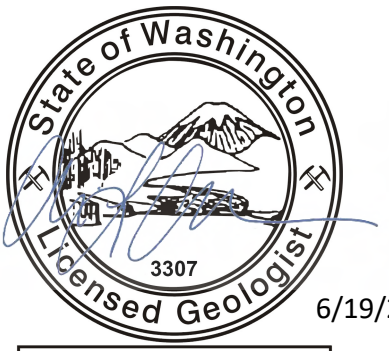
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Aspect Consulting, a Geosyntec Company



6/19/2025

Alexandria Lynn Cochrane

Hannah Cohen, LG
Project Geologist
hannah.cohen@aspectconsulting.com

Ali Cochrane, LG
Senior Geologist
ali.cochrane@aspectconsulting.com

Dave Cook, LG, CPG
Sr. Principal
dave.cook@aspectconsulting.com

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Contents

Acronyms ..... **iv**

Executive Summary **ES-1**
Remedial Investigation ES-1
Feasibility Study and Selected Remedy ES-1

1 Introduction **1**

2 Subject Property Description and Background **1**
2.1 General Site Information 1
2.2 Current and Future Land Use 2
2.3 Historical Use 3
2.4 Potentially Exposed Populations 4
2.5 Climate and Natural Resources 5
2.5.1 Climate 5
2.5.2 Climate Change 6
2.5.3 Natural Resources 7

3 Remedial Investigation **7**
3.1 Previous Investigations and Existing Data 7
3.1.1 Nearby Known Contaminated Sites 8
3.2 Contaminants of Potential Concern and RI Screening Levels 9
3.3 Remedial Investigation Field Program 10
3.3.1 Drilling and Soil Sampling 11
3.3.2 Groundwater Sampling 12
3.3.3 Methane Gas Monitoring 13
3.3.4 Investigation Derived Waste 13
3.4 Remedial Investigation Results 13
3.4.1 Geology and Hydrogeology 14
3.4.2 Fill Soil Results 14
3.4.3 Groundwater Results 14
3.4.4 Methane Monitoring Results 14

4 Conceptual Site Model **15**
4.1 Environmental Setting 15
4.2 Sources and Contaminants of Concern 16
4.3 Nature and Extent of Contamination 17
4.4 Fate and Transport of Contamination 17
4.5 Potential Receptors and Exposure Pathways 18
4.5.1 Protection of Human Health 18
4.5.2 Protection of Terrestrial Ecological Receptors 18

5 Proposed Cleanup Standards 19
5.1 Establishment of Cleanup Levels 19
5.2 Points of Compliance 19

6 Feasibility Study 19
6.1 Cleanup Action Objectives 19
6.2 Potentially Applicable Laws and Regulations 20
6.3 Remedial Technologies Considered 21
6.4 Cleanup Action Alternatives 22
6.5 Evaluation of Alternatives 24
6.5.1 Description of Applicable MTCA Evaluation Criteria 24
6.5.2 MTCA Criteria Evaluation 25
6.6 FFS Findings & Recommendation 27

7 Cleanup Action Plan 27
7.1 Area Requiring Cleanup 27
7.2 Description of Cleanup Action 27
7.3 Restoration Timeframe 29
7.4 Implementation and Schedule 29
7.4.1 Cleanup Action Construction 30
7.4.2 Institutional Controls 30
7.4.3 Monitoring and Periodic Review 30

8 References 31

9 Limitations 32

List of Tables

A Site and Subject Property Information 1
1 Soil Analytical Data
2 Groundwater Analytical Data
3 Methane Measurements
4 Cleanup Alternatives Evaluation

List of Figures

1 Site Location Map
2 Current and Future Use
3 Historical Features
4 Investigation Locations

5 Cross-Section A-A’
6 Cross-Section B-B’
7 Soil Results
8 Groundwater Results
9 Methane Measurements
10 Contaminated Fill Area and Proposed Development Plan

List of Appendices

A Historical Environmental Records
B Boring and Well Construction Logs
C Investigation Derived Waste Manifest
D Data Quality Review (DQR) and Laboratory Reports
E Terrestrial Ecological Evaluation Exclusion Form
F Report Limitations and Guidelines for Use

Acronyms

ARARs	applicable or relevant and appropriate requirements
Aspect	Aspect Consulting, a Geosyntec company
BTEX	benzene, toluene, ethylbenzene, and xylenes
CAOs	cleanup action objectives
CAP	Cleanup Action Plan
COCs	contaminants of concern
COPCs	contaminants of potential concern
cPAHs	carcinogenic polycyclic aromatic hydrocarbons
CSCSL	Confirmed and Suspected Contaminated Sites List
CSID	Cleanup Site Identification
CSM	Conceptual Site Model
CUL	cleanup level
DQR	Data Quality Review
Ecology	Washington Department of Ecology
EHD	Environmental Health Disparities
EIM	Environmental Information Management
EPA	US Environmental Protection Agency
FS	Feasibility Study
GPS	global positioning system
IDW	Investigation-derived waste
IM&M	inspection, maintenance, and monitoring
LEL	lower explosive limit
Mercy	Mercy Housing Northwest
mg/kg	milligrams/kilograms
MTCA	Model Toxics Control Act
NAVD88	North American Vertical Datum of 1988
NFA	No Further Action
NOAA	National Oceanic and Atmospheric Administration

OSHA	Occupational Safety and Health Administration
PAHs	polycyclic aromatic hydrocarbons
PID	photoionization detector
RCRA	Resource Conservation and Recovery Act
RCW	Revised Code of Washington
RI	Remedial Investigation
ROW	right of way
SEPA	State Environmental Policy Act
SSDS	subslab depressurization system
SVOCs	semi-volatile organic compounds
TEE	Terrestrial Ecological Evaluation
TEQ	toxic equivalent concentration
TPCHD	Tacoma-Pierce County Health Department
TPH	petroleum hydrocarbons
USCS	Unified Soil Classification System
USDOT	United States Department of Transportation
VCP	Voluntary Cleanup Program
VOCs	volatile organic compounds
WAC	Washington Administrative Code
WISHA	Washington Industrial Safety and Health Act
WSDOT	Washington State Department of Transportation

Executive Summary

Aspect Consulting, a Geosyntec Company, (Aspect) has prepared this Remedial Investigation (RI), Feasibility Study (FS), and Cleanup Action Plan (CAP) for the proposed 35P Development Project in Tacoma, Washington (Project). The Project spans one Pierce County tax parcel (7470021282) located at the intersection of Pacific Avenue and South 35th Street, in Tacoma, Washington (Subject Property). Mercy Housing Northwest (Mercy) intends to redevelop the Subject Property with a new affordable housing development. The development will consist of a 5-story mixed use building constructed with a slab-on-grade foundation (no underground levels) with paved parking, landscaped and lawn areas, and a courtyard with playground.

The Subject Property is being enrolled in the Expedited Voluntary Cleanup Program (VCP) concurrently with submittal of this report. Following successful implementation of the cleanup action, the Subject Property will be eligible for a Property-specific No Further Action (NFA) determination from the Washington State Department of Ecology (Ecology).

Remedial Investigation

Historically, the Subject Property was a deep ravine that was filled with soil and inert construction debris derived from construction of Interstate 5 in the 1960s and from other nearby construction projects completed in the 1960s to the 1990s. The imported fill material consists of sandy silts and silty sands with gravel; inert building demolition debris such as concrete, bricks, and asphalt; and organic materials such as roots and wood debris. At its deepest, the fill material at the Subject Property extends to approximately 103 feet below ground surface (bgs) and overlies native glacial till deposits. Groundwater is present at 85 feet bgs, with an inferred flow direction toward the north-northeast.

The RI identified that the fill material in the northwest corner of the Subject Property contains concentrations of carcinogenic polycyclic aromatic hydrocarbons (cPAHs) exceeding the Model Toxics Control Act (MTCA) Method A cleanup levels, which are contaminants typically associated with urban fill soils. The RI data indicate cPAH contamination is isolated to the imported fill soil deposited on the Subject Property as the underlying glacial till and regional groundwater was not impacted by urban fill contaminants. Vertically, cPAH contamination in soil extends from 7 feet to 28 feet bgs, with shallower and deeper soil showing contaminants either not detected or detected below Method A cleanup levels, indicating that the top 7 feet of fill soil are acting as a "cap" for the cPAH-contaminated fill soil at the Subject Property. Methane is also present in soil vapor on the Subject Property, likely sourced from natural degradation of organic materials present in the imported fill soil.

Feasibility Study and Selected Remedy

The FS developed three alternatives for cleanup of the Subject Property and evaluated each against criteria defined by MTCA.

- Alternative 1 relies on institutional controls and monitoring, and was determined to be incompatible with the planned change of use/redevelopment.
- Alternative 2 consists of excavation and off-Property disposal of contaminated fill soil and then backfilling the excavation to restore ground surface to facilitate redevelopment. Alternative 2 was determined to have a clearly disproportionate cost of implementation when compared to Alternative 3, and was eliminated from evaluation.
- Alternative 3 consists of maintaining the existing soil cap overlying contaminated fill soil, and constructing the redevelopment features on top of the soil cap.

Based on the results of the FS evaluation, the recommended alternative is Alternative 3, because it has a reasonable restoration time frame, is the most cost-effective alternative, is permanent to the maximum extent practicable, and is direct compatible with the planned change of use for the Subject Property.

As described in the CAP, Alternative 3 will result in the contaminated fill soil being capped by approximately 10 feet of non-contaminated soil, with hardscape (concrete building foundation and concrete walkways) and softscape (lawn, landscaped planting beds, and woodchips over geotextile barrier) constructed over the soil cap. Institutional controls in the form of an environmental covenant will be implemented to manage the contaminated soil remaining in place, and an inspection, monitoring, and maintenance (IM&M) program will be implemented to monitor integrity of the cap. A methane mitigation system, to consist of subslab depressurization system (SSDS) and vapor barrier, will be incorporated into the building design.

The cleanup construction is planned to begin with placement of imported non-contaminated fill soil in Third Quarter 2025 and cleanup is anticipated to be complete within 18 months. The cleanup action will be summarized in a Cleanup Action Report for submittal to Ecology.

This Executive Summary should only be used in the context of the full report.

1 Introduction

This report presents the Remedial Investigation (RI), Feasibility Study (FS), and Cleanup Action Plan (CAP) for the proposed 35P Development Project in Tacoma, Washington (Project). The Project spans one Pierce County tax parcel (7470021282) located at the intersection of Pacific Avenue and South 35th Street, in Tacoma, Washington (Subject Property; Figure 1). The Subject Property is partially undeveloped and vegetated, and partially in use for temporary supportive housing (mobile tiny homes, tents, and support facilities).

Mercy Housing Northwest (Mercy) intends to redevelop the Subject Property with a new affordable housing residential development. The development will consist of a 5-story residential building constructed slab-on-grade (no underground levels) with paved parking, landscaped and lawn areas, and a courtyard with playground.

Historically, the Subject Property was a deep forested ravine and was used for placement of imported fill materials sourced mostly from construction projects during the 1960s to 1990s. At its deepest, the fill material at the Subject Property extends to approximately 103 feet bgs. The fill materials contain elevated concentrations of typical contaminants associated with urban fill soils, including carcinogenic polycyclic aromatic hydrocarbons (cPAHs) exceeding the Model Toxics Control Act (MTCA) Method A cleanup levels.

The RI, FS, and CAP were completed in accordance with the Washington State MTCA, Chapter 70A.305 Revised Code of Washington (RCW) and its implementing regulations, Chapter 173-340 Washington Administrative Code (WAC).

2 Subject Property Description and Background

This section describes the Subject Property location, ownership and use history, current land use, and a description of the proposed Project and future land use.

2.1 General Site Information

The general site information for the Subject Property is summarized in the table below.

Table A. Site and Subject Property Information

Address	3561 Pacific Avenue, Tacoma, Washington
Site Name	Subject Property is not an Ecology-listed Site
Tax Parcel Number	7470021282
Washington State Department of	Subject Property is not an Ecology-listed Site

Ecology (Ecology) Identification	
Location Description	The Subject Property is located east of Pacific Avenue, just southeast of the intersection with Harrison Street, in Tacoma, Washington.
Subject Property and Topography Description	The Subject Property is undeveloped with the exception of a temporary supportive housing facility. The Subject Property is at an elevation of approximately 301 to 306 feet NAVD88, sloping minorly down to the east.
Potential Sources of Soil and/or Groundwater Contamination (discussed in Section 2.3)	Placement of imported fill soils from urban properties.
Current Subject Property Owner	Tacoma Community Redevelopment Authority
Environmental Consultant	Aspect Consulting, a Geosyntec Company Dave Cook, LG, CPG, Senior Principal Geologist dave.cook@aspectconsulting.com 206.838.5837
Ecology Site Manager	Not yet assigned

Note: NAVD88 – North American Vertical Datum of 1988

2.2 Current and Future Land Use

The Subject Property is a 2.97-acre lot comprised of a single tax parcel (Pierce County parcel no. 7470021282) situated in Tacoma, Washington, at an approximate elevation of 301-306 feet NAVD88. The Subject Property is undeveloped, with the exception of a temporary supportive housing facility, visible on Figure 2. The supportive housing facility is comprised primarily of tents and portable kitchen and sanitary facilities on gravel pavement. The remaining areas of the Subject Property are vegetated and/or forested. The Subject Property is currently owned by the Tacoma Community Redevelopment Authority. The northern 55-feet of the Subject Property parcel is subject to an easement with the City of Tacoma (City) due to the presence of City-owned utility lines that run east-west through this portion of the Subject Property (referred to in this report as the City Easement Area). The easement prohibits ground disturbance or placement of barriers at ground surface (such as pavement) that would inhibit the City's ability to access the subgrade utility lines in an emergency situation. The City Easement Area is shown on Figure 2.

The Subject Property is bordered on the north by the Harrison Street right of way (ROW), which is currently undeveloped forested land and not developed with pavement, roadway, or other ROW structures. To the south the Subject Property is bordered by a Tacoma City Light electrical substation. To the east, the Subject Property is bordered by a paved parking lot supporting a retirement facility and undeveloped forested lots, and beyond to

the east are single-family residential properties. Pacific Avenue is adjacent to the western property boundary and beyond the roadway, farther west, is a commercial office building operated by a 911 call center (Figure 2).

Future land use for the Subject Property consists of a change of use related to the planned redevelopment. Mercy intends to redevelop the Subject Property with an affordable housing mixed use multi-family apartment building. The building will be comprised of five-stories of 80 affordable family apartments, one story of commercial space (possibly a food market), and space for associated services and community spaces. The building will be constructed slab-on-grade with no underground levels. Other areas of the Subject Property will be developed with paved parking and driveway areas, and lawn and landscaped garden and playpark areas. The conceptual layout of the proposed Project is shown on Figure 2.

2.3 Historical Use

The Subject Property has never been developed; however, significant quantities of fill have been placed on the Subject Property and adjoining parcels. The original ground surface topography prior to fill placement consisted of a north-south trending ravine with the bottom of the ravine situated between 80 and 120 feet below today's ground surface according to the 1961 U.S. Department of Interior Topographic Survey. A photograph of the Property from 1946 shows the Subject Property ravine as forested, and shows no use or development activity (TRU, 1992). Historical aerial photographs show the Property generally consisting of the ravine until at least 1957, with extensive filling of the entire ravine by 1968 (coinciding with construction of the interstates to the north and east of the Subject Property vicinity). A selection of historical aerial photographs dated 1957, 1968, 1990, and 2017 included as Figure 3 show changes to the Subject Property and adjoining properties over the time period. Photographs, maps, interview records, and other pertinent historical resources referenced in this section are included in Appendix A.

Research into documentation describing the fill source(s) has been conducted as part of several previous investigations that occurred at the Subject Property and at parcels to the north (TRU, 1992; Landau, 2008; Landau, 2021a) and additional research was conducted in support of this RI. Of all records identified, most notable are the 1991 interview records with representatives of the City and Dickson Construction, the primary parties placing fill at the Subject Property and north-adjoining parcels, as well as with residents of neighboring properties who observed fill placement (TRU, 1992). Records indicate that filling at the Subject Property occurred from the early 1960s until December 1990 and was derived primarily from the following sources:

- By 1965, the majority of the former ravine was filled with construction debris and soil generated by construction of Interstate-5 (I-5), Interstate-705 (I-705), and Highway 7 extensions situated north of the Subject Property (see Figure 3). In their 1991 interview, Dickson Construction estimated that approximately half of the fill material placed south of Division Lane (see Figure 2) was derived specifically from construction of I-705 between I-5 and downtown Tacoma, and consisted of excavated soil and reinforced concrete from demolished building and bridge footings (TRU, 1992). Fill placement from these sources likely ceased when the portions of these

roadway extensions in the immediate vicinity of the Subject Property were majorly completed in 1968. Aerial photographs and maps showing development of the I-5, I-705, and Highway 16 areas prior to construction were reviewed; within approximately a half mile of the Subject Property, these areas were primarily residentially developed with single-family homes and apartment buildings, as well as schools. Evidence of significant commercial or industrial uses along the roadway corridors at the time of construction was not observed in these resources.

- Construction debris was backfilled into the ravine at the Subject Property. This material was sourced from City of Tacoma Public Utilities construction projects, various large private construction projects, and was placed by City contractors, including Northwest Construction, who is no longer in business (TRU, 1992). Other contractors approved by the City to dump material at the Subject Property also brought construction debris and excavated soil. In their 1991 interview, Dickson Construction indicated that the material from construction projects consisted of "mostly clean dirt and concrete", but did not include any wood or other organic material (TRU, 1992). Records provided no information on the specific construction projects nor descriptions of their locations.

Filling during this time period did not require a solid waste permit per Tacoma-Pierce County Health Department (TPCHD) because the wastes disposed of were considered inert and the majority of filling occurred prior to regulation of inert wastes by TPCHD (TPCHD, 2010). Records do not indicate that municipal wastes, hazardous wastes, or other wastes typical of a formal "landfill" were placed in the former ravine, and evidence of wastes of this nature have not been observed in explorations (see Section 3).

Filling at the Subject Property ceased in December 1990 (TRU, 1992) and the City graded, sloped, and hydroseeded the ground surface in 1992 for stability and erosion control (TPCHD, 2010). The Subject Property has remained generally unchanged since that time and remains owned and maintained by the Tacoma Community Redevelopment Authority.

2.4 Potentially Exposed Populations

The following presents information on the populations and communities in the vicinity of the Subject Property to support discussion of potentially exposed populations, including likely vulnerable populations and overburdened communities, in accordance with WAC 173-340-350(5)(g)(iii) and 173-350(6)(h).

Washington State law defines *vulnerable population* as population groups that are more likely to be at higher risk for poor health outcomes in response to environmental harms due to adverse socioeconomic factors (unemployment, high housing and transportation costs relative to income, limited access to nutritious food and adequate health care, and linguistic isolation) and sensitivity factors (such as, lower birth weight and higher rates of hospitalization). State law defines *overburdened community* as a geographic area where vulnerable populations face combined, multiple environmental harms and health impacts (RCW 70A.02.010 and RCW 19.405.020). Ecology's *Implementation memo No. 25: Identifying Likely Vulnerable Populations and Overburdened Communities under the Cleanup Regulations* (Ecology, 2024), provides criteria to assist in determining if a potentially exposed population(s) is a likely vulnerable population and/or overburdened

community for the purpose of evaluating exposure risks associated with a contaminated site.

A potentially exposed population is a likely vulnerable population or overburdened community if the potentially exposed population is located in a census tract that ranks a 9 or 10 on the Environmental Health Disparities Index for Washington State[1].

The Subject Property is situated in census tract 53053061900, which has a population of 2,005 as of 2018. Evaluation of the Subject Property relative to the Environmental Health Disparities Index for Washington State indicates that the Subject Property's census tract has a ranking of 10 on the Environmental Health Disparities Index[2]. Therefore, the population immediately surrounding the Subject Property meets the criteria for likely vulnerable populations or overburdened communities.

2.5 Climate and Natural Resources

This section describes the climate and natural resources conditions at the Subject Property, in accordance with WAC 173-340-350(6)(f) though (i).

2.5.1 Climate

MTCA requires that sufficient information regarding climate conditions be collected to determine what climate-related factors could influence migration of contaminants at the Site (WAC 173-340-350(6)(f)). For the Subject Property, these factors are

- precipitation (and associated changes in groundwater levels and flow directions),
- temperature changes, and
- barometric pressures change (an important factor related to vapor migration).

May to September is generally the dry season in Tacoma, with July being the driest month of the year averaging 0.58 inches in precipitation historically. October to April is generally the rainy season, with more than 75 percent of the average annual precipitation falling during that time, and average historical precipitation ranging from 3.05 to 6.44 inches per month. The RI field program (see Section 3.3) occurred from January to June 2025; precipitation during this period was below historical averages, ranging from 0.01 inches in June 2025 to 4.66 inches in March 2025. Historical averages for January

[1] The Washington Environmental Health Disparities (EHD) Index estimates a cumulative environmental health impact score on a scale of 1 to 10 (where 1 represents a low impact score and 10 represents a high impact score) for each census tract reflecting pollutant exposures and factors that affect people's vulnerability to environmental pollution. The rankings help to compare health and social factors that may contribute to disparities in a community. Under the Toxics Cleanup Program's Implementation Memo #25, a potentially exposed population is considered a likely vulnerable population or overburdened community if the population meets any one of three criteria. Two of these criteria require the use of EPA's EJScreen, which is no longer available online. On April 1, 2025, Ecology instructed practitioners to use solely the first criteria in Implementation Memo #25 for new demographic assessments, which relies on DOH's EHD map.

[2] The EHD Index was determined by review of the EHD Map, maintained by the Washington State Department of Health under RCW 43.70.815, accessed on April 30, 2025.

through June are 5.95 inches, 3.86 inches, 4.25 inches, 3.05 inches, 1.97 inches, and 1.52 inches, respectively.

The Subject Property climate is characterized by mild temperatures and a rainy season, with considerable cloudiness during the winter months. Average winter daytime temperatures are in the 40s (degrees Fahrenheit) and nighttime readings in the 30s. During the summer, average daytime temperatures are usually in the 70s, with average nighttime lows in the 50s. During the January to June field work, the average daytime temperature was in the mid-40s to high-70s with average nighttime readings in the mid-30s to high-50s. The barometric pressure ranged from 29.11 to 30.33 inches mercury (Hg), with an average of 29.72 inches Hg[3].

Extreme climate-related events, such as flooding, wildfires, and landslides (Ecology, 2023) are unlikely at the Subject Property due to the urban environment and the high elevation relative to the nearest surface water bodies and sea level. Climate data for the Subject Property presented in this section was obtained from the National Oceanic and Atmospheric Administration's (NOAA's) National Weather Service portal.

2.5.2 Climate Change

MTCA requires consideration of a cleanup action's resiliency to climate change factors; WAC 173-340-360(3)(a)(v) states that a cleanup action should "provide resilience to climate change impacts that have a high likelihood of occurring and severely compromising its long-term effectiveness," and Ecology has identified that climate change factors most likely to pose a risk to sites in Washington State include rising sea levels, extreme precipitation events, severe drought, increased wildfire risk, and marine water acidification (Ecology, 2023). Of these, the factors most likely to affect environmental conditions at the Subject Property are changes in weather such as seasonal rainfall patterns and the magnitude and frequency of extreme storm events, which could result in notable changes as follows:

- Significant changes to precipitation could result in changes to groundwater elevation, flow direction, and gradient, which influences the flow and transport of contaminates in groundwater, if present.
- Significant storm events or major rainfall events could result in erosion of exposed fill soil at ground surface, with runoff transporting suspended fill soil particles and associated contaminants in fill soil, if present.
- Significant changes in barometric pressure (such as, related to changes in weather patterns), may affect migration of contaminates in soil vapor, if present.

In accordance with MTCA, resiliency to climate change factors will be incorporated into evaluation of the cleanup alternatives during the FS (Section 6).

[3] Data was acquired from Synoptic Data, station ID G5284 Tacoma, over a period from January 6, 2025, to June 12, 2025.

2.5.3 Natural Resources

2.5.3.1 Flora and Fauna

MTCA requires consideration of the natural resources and ecological receptors (flora and fauna) that are reasonably likely to be potentially exposed to hazardous substances at the Site (WAC 173-340-350(6)(i)). The Subject Property is situated in an urban neighborhood consisting of commercial and municipal properties, private residences, and City-owned paved ROWs. With the exception of the existing ravine over 500 feet north of the Subject Property, the surrounding area is typical of urban developed land, with vegetation limited to landscaped planting areas, street-side trees, lawns and plantings on residential properties, and park space. The parcels to the north of the Subject Property within the historic ravine are undeveloped and heavily vegetated.

Natural resources of a scale, magnitude, or significance that would change or drive the cleanup action selection process are not present at the Subject Property. Terrestrial ecological receptors are further discussed in Section 4.5.2.

2.5.3.2 Groundwater Use

Properties in and surrounding the Subject Property are served by municipal water supply. Drinking water for the City is provided from a combination of 24 local City-owned water supply wells and the Green River Municipal Watershed. A drinking water use survey for the area was completed by searching Ecology's Well Database and the Source Water Assessment Program well database. No use of groundwater or surface water for drinking purposes were identified within a half mile of the Subject Property. According to the Pierce County water quality data map, the nearest water supply wells are approximately 2.5 miles east-southeast of the Subject Property. According to the Washington State Department of Health, Source Water Assessment Program Map, the Subject Property is within the 5-year Time of Travel of the Tacoma Water Division, Wellhead Protection Area.

3 Remedial Investigation

This section presents a summary of the previous environmental investigation work, and presents the scope, approach, and results of the RI field program completed by Aspect. Exploration locations are shown on Figure 4.

3.1 Previous Investigations and Existing Data

In support of a previous proposed redevelopment that was ultimately not pursued, an environmental and geotechnical investigation occurred at the Subject Property in 2018, as follows. The investigation locations from 2018 are shown on Figure 4.

In 2018, a combined environmental and geotechnical soils and hydrology assessment was performed at the Subject Property by SCJ Alliance and Intertek (SCJ Alliance, 2018 and Intertek, 2018). The assessment consisted of test pits and soil borings, as follows:

- Twelve test pits (TP-1 to TP-12[4]; Figure 4) were excavated to depths ranging from 11 to 17 feet bgs, distributed roughly evenly across the parcel in a grid-like pattern. Ten soil samples were collected and analyzed for petroleum hydrocarbons (TPH) and metals (arsenic, barium, cadmium, chromium, lead, selenium, silver, and mercury), with none of these contaminants detected at concentrations above the MTCA Method A cleanup levels. Soils observed in the test pits consisted of imported fill soil, more specifically interpreted as "a mixture of reworked native soils, quarry spalls, concrete chunks, and some woody debris" (SCJ Alliance, 2018). Minor quantities of water were observed in the test pits, interpreted to be infiltrating winter stormwater perched in some subsoil layers. SCJ Alliance did not sample soil and groundwater for other contaminants commonly associated with imported urban fill soils (for example, polycyclic aromatic hydrocarbons [PAHs]).
- Nine deep soil borings were advanced to define the thickness of fill at the Subject Property (B-1 to B-9; Figure 4). The borings were advanced to depths ranging from 86.5 to 106.5 feet bgs. Fill was observed in all borings, and underlying native soils were encountered in B-7 at a depth of 82.5 feet bgs. Fill thickness ranged between 82.5 to 106.5 feet thick, with underlying native soils consisting of "glacial deposits". Regional groundwater was encountered in two deep borings, B-8 and B-9, at 96 feet and 93 feet bgs, respectively. Soil or groundwater samples for laboratory analysis were not collected from the borings.

3.1.1 Nearby Known Contaminated Sites

Six Pierce County tax parcels to the north of the Subject Property (2081410040, 2084140050, 2085130060, 2085130070, 2085140040, and 2085140070) make up the Site known to Ecology as the "35th Street Landfill City Fill," listed on Ecology's Confirmed and Suspected Contaminated Sites List (CSCSL) with Cleanup Site Identification (CSID) No. 341, and also referred to as the "Former City of Tacoma's Street and Grounds Fill Site". The 35th Street Fill Site was reported to Ecology on August 5, 2005, and recurring annual to semi-annual monitoring of soil and groundwater seeps and quarterly to annual methane monitoring was conducted at the 35th Street Fill Site by the City and the TPCHD from approximately 1990 to 2006.

In 2008, the City and TPCHD conducted an RI focusing on the parcels north of Division Lane (Landau, 2008). The RI consisted of test pits, a deep boring, and shallow direct-push borings converted to soil gas monitoring wells. Out of 41 soil samples analyzed for TPH, arsenic, and cPAHs, eight samples showed concentrations of cPAHs that exceed the MTCA Method A cleanup level of 0.1 milligrams per kilogram (mg/kg) including four 12-foot deep test pits: TP-LAI-03,- 06, -09, -10, and four 24- to 28-foot deep direct push borings (GP-LAI-01, -03, -04, -05). TPH exceeded Method A cleanup levels, with oil-range TPH at 4,000 mg/kg in the 35-36.5 feet samples in soil boring B-LAI-01. Arsenic exceeded Method A cleanup levels at 21.5 mg/kg in the 16-20 feet samples in GP-LAI-04.

[4] Note that the 12 test pits have varying nomenclature between the two 2018 reports. The Intertek report refers to the test pits as TP-1 through TP-12, while the SCJ Alliance report refers to the same test pits as SP-1 through SP-12. In this Phase I ESA report, the test pits are referred to as TP-1 through TP-12 only for simplicity.

Methane monitoring within the six gas probes showed that methane exceeded the lower explosive limit (LEL) of 5 percent at two of the probes during the first sampling event (27 percent at GP-LAI-05 and 30.1 percent at GP-LAI-06 on May 15, 2008), but not in subsequent events (1.7 percent at GP-LAI-05 and 0.1 percent at GP-LAI-06 on May 29, 2008). During sampling events conducted between 2004 and 2006, overall methane levels were at or below 0.15 percent.

Subsequently, in 2021, Landau conducted a Phase II field investigation at the request of Tacoma Community Redevelopment Authority to supplement the prior RI work, and assess potential impacts to future development on parcels within the 35th Street Landfill Site (Landau, 2021b). The investigation consisted of three soil borings (B-1-21 through B-3-21) advanced to a maximum depth of 31.5 feet bgs. Two soil samples were collected from each boring; one at 5 feet bgs and a second at 30 feet bgs. The soil samples were analyzed for TPH, metals (arsenic, barium, cadmium, chromium, mercury, selenium, and silver), volatile organic compounds (VOCs), and semi- volatile organic compounds (SVOCs; including cPAHs). The results of the investigation showed cPAHs above the MTCA cleanup level of 0.1 mg/kg in one soil sample collected from B-2 at 5 feet bgs. Remaining analytes tested were non-detect or detected below the MTCA cleanup levels.

The City continues to perform quarterly methane monitoring, utilizing the six permanent gas probes installed during the 2008 RI (GP-LAI-01 to GP-LAI-06). The First Quarter 2022 through Fourth Quarter 2023 shows methane above the LEL of 5 percent methane in GP-LAI-05 and GP-LAI-06 in nearly all quarters. The most recent monitoring data at the time of this report, Fourth Quarter 2023, showed 45.8 percent methane in LAI-GP-05 and 29.5 percent methane in GP-LAI-06. These soil vapor monitoring wells are located approximately 300 feet north of the Subject Property.

Additional discussion and figures showing exploration locations are available on Ecology's Cleanup Site webpage for the 35th St City Fill Site[5].

3.2 Contaminants of Potential Concern and RI Screening Levels

As described in Section 2.3, a significant quantity of imported urban fill soil has been placed at the Subject Property. The research described in Section 2, as well as the soil, groundwater, and soil vapor conditions observed during previous investigations described in Section 3.1, were used to identify the contaminants of potential concern (COPCs) and media of concern for assessment during the RI field program. Specifically, the COPCs are those contaminants that are commonly associated with imported fill and debris sites.

For all areas of the Subject Property, the list of COPCs evaluated are:

- Gasoline-, diesel-, and oil-range TPH in soil and groundwater
- VOCs, including petroleum-associated and halogenated VOCs in soil and groundwater

[5] https://apps.ecology.wa.gov/cleanupsearch/site/341

- SVOCs, including PAHs and cPAHs in soil, and cPAHs in groundwater
- Metals in soil

Because organic matter may have been included with the fill soil placed at the Subject Property, and because the methane in soil vapor at the 35th St City Fill Site may migrate in soil vapor to the Subject Property, there is also potential for methane to be present in soil vapor at the Subject Property. Methane is not a MTCA-regulated hazardous substance but can pose an exposure risk to occupants of the Subject Property. Therefore, methane in soil vapor is also identified for assessment during the RI field program.

The screening levels for the RI sample data, or the values that are used to evaluate data collected during the RI to assess the nature and extent of contamination at the Subject Property, are the MTCA Method A values for Unrestricted Land Use for soil, and Method A values for groundwater. Methane in soil vapor, which does not have an established screening level in MTCA, is evaluated relative to the LEL of 5 percent.

The screening levels are selected based on the potential exposure pathways and receptors and applicable regulatory criteria, as follows:

- **Soil/fill leaching to groundwater.** Contaminants in soil can leach to groundwater by infiltration of precipitation below unpaved or gravel surface areas through contaminated soil, or where groundwater is in contact with contaminated soil.
- **Ingestion of groundwater.** Human receptors have the potential to contact contaminants in groundwater via ingestion. Note that while groundwater at the Subject Property is not currently used as drinking water, the screening levels reflect the highest beneficial use of groundwater as drinking water.
- **Direct contact with soil and fill.** Human receptors have the potential to contact contaminants in fill soil where it is exposed at ground surface. Construction workers have the potential to contact contaminants in soil during redevelopment activities.
- **Soil vapor/methane discharge to indoor air.** Methane in soil vapor has the potential to migrate and expose indoor air receptors, collect in subsurface utility vaults and create an oxygen deficient space, or collect beneath future structures and pose an explosion hazard.

The presence, nature, and extent of COPCs in soil and groundwater, and the presence and magnitude of methane in soil vapor are evaluated to determine whether any of these potential exposure pathways are complete or incomplete based on RI data in Section 4.5.

3.3 Remedial Investigation Field Program

The scope of work for the RI field program was developed to address data gaps regarding the nature and extent of contamination, with the ultimate goal of acquiring sufficient and additional data to enable selection of cleanup standards and develop cleanup alternatives for the Subject Property. The primary data gaps identified are as follows:

1. **Data Gap 1: Uncharacterized Fill Soil.** The thickness of fill across the Subject Property, and the presence/absence of COPCs, was only partially

assessed during the previous investigations (see Section 3.1), and additional investigation was needed in areas of the Subject Property that were not investigated previously, areas where borings were not deep enough to encounter native soils beneath fill, and/or where chemical analysis of soil samples was limited or did not occur during previous investigations.

2. **Data Gap 2: Uncharacterized Groundwater Conditions and Quality.** Previous investigations have not included assessment of groundwater conditions or quality and the presence/absence of contaminants in groundwater (particularly if/where fill is in contact with groundwater) are unknown.

3. **Data Gap 3: Unknown Methane Risk.** The potential for methane in soil vapor at the Subject Property has not been evaluated. As discussed in Section 3.1.1, methane has been observed on parcels north of the Subject Property.

The RI field program scope of work was developed to address the three data gaps listed above, and consists of:

- Advancing three soil borings through the fill soil to underlying native soil (AB-06: 81.5 feet bgs, AB-07: 111.5 feet bgs, and AMW-04: 96.5 feet bgs), and five soil borings to shallower depths (15 feet bgs; AB-01, AB-02, and AGP-01 through AGP-03) within the fill soil, and collecting soil samples for analysis of COPCs.
- Completing one soil boring as a groundwater monitoring well (AMW-04) screened from 75 to 95 feet bgs, and sampling groundwater for analysis of COPCs.
- Completing the three shallow borings as soil vapor probes screened at 4 to 4.5 feet bgs, for collection of methane measurements (AGP-01 through AGP-03).

In addition to the above explorations conducted at the Subject Property, one soil boring was also advanced in the Harrison Street ROW to the north of the Subject Property (AB-08) for construction planning purposes and is referred to herein as an “off-Property boring”.

The field activities are described in the following sections, and the results of the RI field program are described in Section 3.4. Exploration locations are shown on Figure 4.

3.3.1 Drilling and Soil Sampling

To address Data Gap 1 (uncharacterized fill soil) and assess the vertical and horizontal extent of fill soil and fill soil quality on the Subject Property, soil characterization was conducted in two mobilizations, as follows:

- January 6 to 21, 2025: Three soil borings (AB-06, AB-07, and AMW-04) were advanced using sonic drilling methods.
- March 17 to 18, 2025: Two soil borings (AB-01 and AB-02) and three soil vapor probes (AGP-01 through AGP-03) were advanced using direct push methods.

Soil boring locations are shown on Figure 4. Drilling equipment was operated by Cascade Drilling LP of Woodinville, Washington. Boreholes were advanced to depths ranging from 15 feet to 111.5 feet bgs; the final depth of each boring was determined based on reaching native soils for borings AB-06, AB-07, and AMW-04, or by reaching 15 feet bgs for the remaining shallower soil borings. An Aspect field geologist performed field screening for signs of petroleum or volatiles impacts using water sheen methods and by headspace volatiles assessment using a photoionization detector (PID). The geology was logged in general accordance with the ASTM International (ASTM) Standard D2488 for visual classification of soils using the Unified Soil Classification System (USCS). Soil and field screening observations are recorded on the boring logs included as Appendix B.

A total of 51 soil samples were collected for chemical analysis based on field screening results, soil types, and the presence of debris. Soil was placed directly into laboratory-supplied sample containers and were transported to Friedman and Bruya of Seattle, Washington, and analyzed for the following constituents:

- SVOCs, including PAHs and cPAHs by EPA Method 8270E.
- VOCs by EPA Method 8260
- Gasoline-range TPH by NWTPH-Gx
- Diesel-range and oil-range TPH by NWTPH-Dx
- Resource Conservation and Recovery Act (RCRA) 8 Metals by EPA Method 6020B

Select soil samples collected from AB-06, AB-07, AB-08, and AMW-04 were also analyzed for asbestos by EPA 400 Point Count Method to support soil disposal planning for the future redevelopment. The soil investigation results are presented in Section 3.4.2.

Following completion, soil borings were backfilled by the licensed driller using bentonite per Chapter 173-160 of WAC. The horizontal location of each boring was surveyed with respect to the Washington State Plane Coordinate System using the 2011 North American Datum (NAD83 [2011]) using a handheld global positioning system (GPS) device with submeter accuracy.

3.3.2 Groundwater Sampling

To assess Data Gap 2 (uncharacterized groundwater), a groundwater monitoring well was constructed in the soil boring, AMW-04, and consisted of a 2-inch-diameter Schedule 40 PVC casing and 0.010-inch (10-slot) screen set across the water table using a 20-foot screen interval from 75 to 95 feet bgs (elevation 212 to 232) to capture fluctuating groundwater levels. Following installation, the well was developed to improve hydraulic connectivity between the well and the surrounding formation. Development consisted of surging and purging the well using a single- or double- stage pump with a flow controller until at least 10 casing volumes were removed and water was visibly clear. Well construction details are included on the boring logs in Appendix B.

A groundwater sample was collected from the well on March 20, 2025, using low-flow sampling methodology (EPA, 1996) following stabilization of field parameters

(temperature, specific conductivity, dissolved oxygen, pH, oxidation reduction potential, and turbidity). Sample intake tubing was placed at the midpoint of the submerged portion of the well screen. The groundwater sample was submitted to Friedman & Bruya of Seattle, Washington, for laboratory analysis of the following constituents:

- VOCs by EPA Method 8260D
- cPAHs by EPA Method 8270E
- Gasoline-range TPH by NWTPG-Gx
- Diesel- and oil-range TPH by NWTPH-Dx

3.3.3 Methane Gas Monitoring

To assess Data Gap 3 (uncharacterized methane), three permanent soil vapor probes were installed on March 17 and 18, 2025, to evaluate methane concentrations in soil vapor at the Subject Property. Soil vapor probes (AGP-01 to AGP-03; Figure 4) were installed using direct-push drilling methods by Cascade Drilling LP of Woodinville, Washington, in the northeast and west sections of the Subject Property, in locations that will be within the future building footprint (Figure 4).

The soil vapor probes were constructed of 0.25-inch-diameter fluoropolymer tubing connected to a 6-inch-long stainless-steel vapor screen. The soil vapor probe was screened from 4 to 4.5 feet bgs. The vapor probes were completed using a 10/12 silica sand filter pack from the bottom of the boring to 6 inches above the top of the vapor screen, with an angular seal of bentonite placed above the filter pack to within 1.5 feet bgs. During drilling, high moisture content was observed in fill soil at 5 feet bgs at each of the soil vapor probe installation locations, so the probe screens were installed at 4 feet bgs to avoid screening in saturated soil.

Soil vapor monitoring was performed on March 20 and April 7, 2025, and a follow up measurement was collected on June 12, 2025. Prior to soil vapor probe monitoring, an Aspect representative checked each soil vapor probe for water accumulation and removed moisture from the tubing with a peristaltic pump, if present. Each soil vapor probe was monitored with a LANDTEC GEM 5000 to gauge for methane gas concentrations. At the time of monitoring, Aspect observed falling barometric pressure and recorded pressures of 29.99 in Hg on March 20th, 29.84 in Hg on April 7th, and 29.74 in Hg on June 12, 2025.

3.3.4 Investigation Derived Waste

Investigation-derived waste (IDW) generated by both investigation phases (soil cuttings, decontamination water, and purged groundwater) was containerized in 55-gallon drums and ultimately disposed of at Lafarge North America in Seattle, Washington (Appendix C).

3.4 Remedial Investigation Results

This section presents the analytical results of the RI field program described above. Analytical data is presented in Tables 1, 2, and 3, and laboratory reports are included in Appendix D.

3.4.1 Geology and Hydrogeology

The fill soil at the Subject Property consists of brown to gray sandy silts and silty sands with varying gravel content, gravel with varying sand and silt content, as well as cobbles, concrete debris, asphalt, brick, and organic material such as roots and wood debris. The various debris types were observed throughout the Subject Property at various depths typically in trace amounts, with the exception of AB-06, where a 2-foot-thick section of concrete debris was observed with additional trace debris observed for an additional 2 feet (Appendix B). Fill soil thicknesses on the Subject Property ranged from 78 to 103 feet thick in the RI explorations. The Vashon till underlies the fill soil and consists of dense brown to gray silty sand with gravel and sand with silt and gravel.

Regional groundwater was encountered at 85 feet bgs (elevation 219) at the Subject Property well AMW-04. Moist to wet soil was observed in soil samples obtained at depths ranging from 4.5 feet bgs (in AB-01) to 55 feet bgs (in AB-08), typically in more porous fill soil intervals. It is likely that this water represents precipitation that seeped into the looser fill material and percolated into airspace between gravel and sand grains.

3.4.2 Fill Soil Results

The chemical analytical results for soil samples collected during the January to April 2025 field program were evaluated against the MTCA Method A values, as described in Section 3.2. The fill soil extents are shown graphically on the cross sections in Figures 5 and 6. Analytical soil results for the Subject Property COPCs are shown in Table 1 and are shown on Figure 7.

In AB-06, benzo(a)pyrene and cPAHs toxic equivalent concentration (TEQ) were detected at 0.88 mg/kg and 1.17 mg/kg, respectively, at 7 feet and at 0.16 mg/kg and 0.21 mg/kg, respectively, at 28 feet; all of which exceed the MTCA Method A cleanup level of 0.1 mg/kg.

In the remaining 7 soil borings and 49 samples collected on-Property, all other analytes were either not detected at concentrations above laboratory reporting limits or were detected at concentrations below the MTCA Method A values.

Off-Property soil boring AB-08 (in the north-adjacent Harrison Street ROW) contained cPAHs TEQ at a concentration of 0.104 mg/kg at 6 feet bgs, which exceeds the MTCA Method A cleanup level of 0.1 mg/kg, as well as benzene at a concentration of 0.047 mg/kg at 17 feet bgs which also exceeds the MTCA Method A cleanup level of 0.03 mg/kg.

3.4.3 Groundwater Results

Groundwater analytical results from monitoring well AMW-04 are presented in Table 2 and shown on Figure 8. All analyzed analytes were not detected at concentrations above laboratory reporting limits.

3.4.4 Methane Monitoring Results

Methane measurements are presented in Table 3 and shown on Figure 9. Methane gas concentrations were as follows:

- **March 2025**: Methane concentrations were 3.6 percent methane by volume in AGP-03. Methane was not measured in AGP-01 or AGP-02 due to precipitation in the vapor probe tubing.
- **April 2025**: Methane concentrations ranged from 0.3 percent in AGP-01 to 8.8 percent by volume in AGP-02.
- **June 2025**: Methane concentrations ranged from 0.0 percent in AGP-01 to 5.7 percent by volume in AGP-02.

When compared to the LEL for methane of 5 percent by volume, the LEL was exceeded in AGP-02 in April and June 2025 and in AGP-03 in April 2025.

4 Conceptual Site Model

This section presents the Conceptual Site Model (CSM) using all pre-existing and historical Subject Property characterization data and the results of the RI field program described in Section 3. The CSM is the basis for developing technically feasible cleanup alternatives and selecting a final cleanup action. The following sections discuss the components of the CSM, including the sources of the COPCs, the nature and extent of contamination, contaminant fate and transport, and a preliminary exposure assessment.

4.1 Environmental Setting

The physical characteristics of the Subject Property and its immediate vicinity, including topography, hydrologic conditions, and existing uses of groundwater are described in this section.

The Subject Property is located in the Puget Lowland region, comprising a broad glacial drift plain between the Olympic Mountains and foothills of the Cascade Range, characterized by glacial deposits. On a more localized scale, geologic maps covering the Subject Property area identify the surface unit at the Subject Property as Quaternary Vashon till (Qvt) deposited during the Vashon Stade of the Fraser Glaciation between 25,000 to 10,000 years ago (Smith, 1977), which is now present beneath the fill at the Subject Property. Vashon till is characterized by very dense silt, sand, and gravel, however the upper 3 feet of the unit is generally weathered and exhibits medium density. Vashon till was encountered throughout the Subject Property in historical borings at 33.5 feet bgs in B-1, at 38 feet bgs in B-5, at 34 feet bgs in B-6, and at 82.5 feet bgs in B-7 and in Aspect explorations at 78 feet bgs in AB-06, at 103 feet bgs in AB-07, at 85 feet bgs in AB-08, and at 83 feet bgs in AMW-04 (Figures 5 and 6).

The Subject Property is situated approximately 2 miles west of the Puyallup River Valley and 1 mile south-southwest of the Puyallup River delta at Commencement Bay, where surface geology is comprised of Quaternary alluvium. Prior to the fill placement described in Section 2.3, the Subject Property was a natural ravine (up to 120 feet deep), oriented north-south that drained into Commencement Bay.

The U.S. Department of the Interior Topographic Survey for the Tacoma South Quadrangle dated 1961 shows the historical, natural ground surface topography of the ravine as elevation 300 feet above mean sea level (msl) at the top of the ravine edge, sloping steeply down to the bottom of the ravine at elevation 220 feet at the south end of the Subject Property (80 foot difference). Based on drilling observations, the former ravine is 105 feet deep at the north end of the Subject Property (elevation 305 feet at the top to elevation 200 feet bottom in AB-07) and 83 feet deep at the south end of the Subject Property (elevation 224 feet in AMW-04). The ravine is shallower along the western property boundary (78 feet deep and 82.5 feet deep in AB-07 and B-7, respectively). Filling activities, including the various materials placed as fill, are described in Section 2.3. Today, surface topography at the Subject Property gently slopes to the northeast from elevation 306 on the west to elevation 301 on the east.

Regional groundwater has been encountered at depths of approximately 89 to 93 feet bgs during drilling at the Subject Property (elevation 216 in AMW-04 to elevation 212 in B-9), and static groundwater was measured in AMW-04 at 85.25 feet bgs in March 2025. Based on historical and current surface topography of the Subject Property and surrounding area, regional groundwater likely flows to the north-northeast toward Commencement Bay. Shallow water seepage in the fill has been encountered at various depths ranging from 4.5 feet bgs (in AB-01) to 55 feet bgs (in AB-08), interpreted as infiltrated precipitation in more permeable fill layers. In some cases, this water appears to collect in air pockets created by the various debris deposited in the fill, such as in AB-06 at 35 feet bgs and in AB-07 at 10 feet bgs (Appendix B).

4.2 Sources and Contaminants of Concern

The Subject Property was undeveloped and unused prior to fill placement and there are no indications of past point source releases of hazardous substances at the Subject Property. As described in Section 2, historical records indicate that the fill material primarily consists of excavated soil from construction projects, and inert building demolition debris, and some woody material was observed during investigation activities. Historical records related to the specific source properties for the excavated soil from construction projects are limited, and the only specific source properties identified are those properties/areas that are now occupied by the I-5, I-705, and Highway 16, north of the Subject Property. Prior use of the properties now occupied by these interstates appears to be primarily residential.

The contaminants of concern (COCs) for the Subject Property are cPAHs in soil, which are the only COPCs that were identified at the Subject Property exceeding the RI screening levels (the MTCA Method A values).

No COPCs were identified in groundwater and groundwater is therefore not an affected media at the Subject Property.

While not regulated under MTCA, methane gas was also considered during this RI because of the potential for methane gas to be generated at urban fill sites and because methane is present in soil vapor on parcels north of the Subject Property. Methane in soil vapor at the Subject Property appears to fluctuate with changing barometric and weather conditions, and occasionally has been measured slightly above the LEL of 5 percent (April 2025, AGP-02 at 8.8 percent). The source of the methane in soil vapor at the

Subject Property is likely related to woody material observed in the fill, and may also be migrating onto the Subject Property from other nearby parcels that make up for the former ravine. The concentrations of methane in soil vapor are significantly higher at the 35th Street City Fill Site located approximately 300 feet north of the Subject Property, based on quarterly monitoring data collected in 2023 (see Section 3.1.1).

4.3 Nature and Extent of Contamination

Contamination at the Subject Property is isolated to the imported fill soil, and soil results indicate the native glacially consolidated soils are not impacted. The nature of the contamination at the Subject Property is cPAHs associated with imported fill from urban sources. The extent of cPAH-contaminated fill soil at the Subject Property is limited to the northwest corner in the vicinity of AB-06, the only exploration location out of eight with soil samples that contained any COCs at concentrations exceeding the MTCA Method A cleanup level. This area is referred to in this report as the "Contaminated Fill Area." Vertically, the Contaminated Fill Area extends from 7 feet to 28 feet bgs, with shallower and deeper soil showing contaminants either not detected or detected below Method A cleanup levels. Laterally, the Contaminated Fill Area extends west of AB-06 to the Subject Property boundary, east to AB-07, and south to AGP-01, where contaminants were not detected or detected below cleanup levels.

As discussed in Section 4.2, fill soil is the only media containing COCs at the Subject Property. Groundwater does not come into contact with any contaminated soil, and the groundwater sample from AMW-04 did not contain any contaminants, so there are no indications that groundwater is contaminated at the Subject Property.

Methane in soil vapor was measured in each of the on-Property vapor probes, AGP-01 to AGP-03, and is present in soil vapor probes on parcels to the north that are also located within the former ravine. Based on these data, and because fill is present across the full Property, methane in soil vapor at the Subject Property likely extends across the full Property at fluctuating concentrations.

4.4 Fate and Transport of Contamination

Contaminants derived from the sources described in Section 4.2 were introduced to the Subject Property when the contaminated fill material was placed there. In soil, cPAHs are present in the Contaminated Fill Area between 7 and 28 feet bgs. Although precipitation likely infiltrates from ground surface downward, through the Contaminated Fill Area and possibly to deeper depths, the lack of COCs in groundwater suggest that any downward movement, if it occurred, ceased at a depth above groundwater. Because the Contaminated Fill Area is located beneath, up to 7 feet of non-contaminated fill, transport of soil COCs via erosion or surface runoff is unlikely.

Methane concentrations identified in soil vapor did not vary significantly between the three sampling locations, suggesting that sources of methane to soil vapor are likely distributed through the fill in the former ravine (including both on- and off-Property areas). Methane in soil vapor may migrate by diffusion, including via preferential pathways such as utility trenches.

4.5 Potential Receptors and Exposure Pathways

An exposure pathway describes the mechanisms by which human or ecological exposure to a contaminant can occur under current conditions, assuming no remedial action or protective control is in place. To be considered complete, an exposure pathway has the following characteristics:

- An identified source of contaminants
- A mechanism for contaminant release and transport from the source
- An exposure route through which contact with the contaminant can occur
- A receptor that can be exposed to the contaminant

4.5.1 Protection of Human Health

The nature and extent of COCs in Subject Property media determine the potential exposure pathways and receptors at the Subject Property. The following section provides a description of the potential exposure pathways and receptors for the Subject Property.

- **Direct contact with soil and fill**. The direct contact pathway considers both dermal contact and ingestion of soil beneath the Subject Property. There is potential for workers to be exposed to soil contamination present in the Contaminated Fill Area at 7 feet bgs when redevelopment activities commence, if excavation extends to that depth or deeper. Therefore, the direct contact pathway is considered complete for this area of the Subject Property, shown on Figure 10 as the “Contaminated Fill Area”. Because contaminants do not exceed the RI screening levels in other areas of the Subject Property, the direct contact pathway is incomplete for other areas of the Subject Property.
- **Soil vapor/methane discharge to ambient air and/or into future structures**. Methane in soil vapor has the potential to be explosive and to displace oxygen in certain confined environments. Methane has the potential to migrate and expose ambient air receptors, humans in confined spaces, and/or humans in structures built above methane sources. Therefore, there is potential for the soil vapor to indoor air pathway to be complete under current and future uses, such as during Subject Property redevelopment and in any Subject Property buildings occupied after redevelopment.

4.5.2 Protection of Terrestrial Ecological Receptors

The purpose of a Terrestrial Ecological Evaluation (TEE) is to assess the potential risk to terrestrial plants and/or animals that live entirely or primarily on affected land. This Subject Property qualifies for a TEE exclusion under WAC 173-340-7491(1)(a) and WAC 173-340-7491(1)(b) because all soil contamination is, or will be, at least 6 feet below the surface, physical barriers (such as buildings or paved areas) will be used to prevent exposure to plants and wildlife, and institutional controls will be used to manage remaining contamination. A copy of the TEE form documenting this exclusion is provided in Appendix E.

5 Proposed Cleanup Standards

The proposed cleanup standards include the cleanup levels and the point of compliance for the Subject Property.

5.1 Establishment of Cleanup Levels

Preliminary soil cleanup levels are developed during a RI for those contaminants identified at concentrations exceeding the RI screening levels, referred to as the COCs (Section 4.2), and for which there is a current or likely future exposure pathway (Section 4.5.2).

The preliminary cleanup levels for soil are the MTCA Method A Cleanup Levels for Unrestricted Use.

There are no MTCA cleanup levels established for methane, because it is not a regulated hazardous substance. Methane will be evaluated against the LEL.

5.2 Points of Compliance

The point of compliance is the point where contaminant- and media-specific cleanup levels shall be met, in accordance with MTCA. Based on the findings of the RI, the points of compliance for the Subject Property consist of the following:

- For soil, the point of compliance for soil is throughout the Subject Property from the ground surface to 15 feet bgs, a reasonable estimate of the depth of soil that will be excavated and distributed at the soil surface as a result of Subject Property development activities. (WAC 173-340-740(6)(d)).

The points of compliance are used for development and evaluation of the cleanup alternatives in the Feasibility Study (Section 6).

6 Feasibility Study

This section presents the FS for the cleanup alternatives for the Property. This FS considers the criteria defined in WAC 173-340-360 *Selection of Cleanup Actions* for evaluating cleanup alternatives and selecting a cleanup action. The findings of the FS and recommended cleanup alternative for the Subject Property are presented in Section 6.6.

6.1 Cleanup Action Objectives

The objective of the cleanup is to obtain a No Further Action (NFA) determination from Ecology for the Subject Property and to allow for redevelopment as an affordable housing building with ground-level parking and outdoor spaces. To obtain an NFA, the existing contaminated fill soil will need to be remediated at the established points of compliance in accordance with MTCA.

The cleanup action objectives (CAOs) are goals for protecting human and environmental health. They are established based on the nature and extent of contamination, the receptors that are current and potentially threatened, and the potential for human and environmental exposure. Based on the potential exposure pathways, receptors, and the characterization described in the RI, the CAOs for the Subject Property are as follows:

- Protection of humans from direct contact with contaminated fill soil

While not a MTCA-regulated substance, methane was also identified in soil vapor at the Subject Property during the RI. Methane exposure mitigation will be incorporated into the design of the selected cleanup action alternative.

The CAOs form the basis of development of proposed cleanup alternatives, described in the following sections.

6.2 Potentially Applicable Laws and Regulations

The cleanup action must comply with state and federal laws (WAC 173-340-710[1]). Requirements from state and federal laws that are determined to be legally applicable or relevant and appropriate are collectively referred to as applicable or relevant and appropriate requirements (ARARs). Potentially applicable state and federal laws are discussed below.

MTCA. The MTCA statute (Chapter 70.105D Revised Code of Washington [RCW]) is the primary law that governs cleanup of contaminated sites in the state of Washington (Ecology, 2013). The MTCA cleanup regulation (Chapter 173-340 WAC) specifies criteria for the evaluation and conduct of a cleanup action. It requires that cleanup actions protect human health and the environment, meet environmental standards in other applicable laws, and provide for monitoring to confirm compliance with cleanup levels.

For cleanup actions involving containment (such as, capping) of hazardous substances, MTCA has requirements that must be met for the cleanup action to be considered in compliance with soil cleanup standards. These include implementing a monitoring program that is designed to ensure the long-term integrity of the containment system and applying institutional controls where appropriate to the affected areas (WAC 173-340-440).

SEPA. The State Environmental Policy Act (SEPA; Chapter 197-11 WAC) and the SEPA procedures (Chapter 173-802 WAC) ensure that state and local government officials consider environmental values when making decisions. The SEPA process begins when an application for a permit is submitted to an agency, or an agency proposes to take some official action, such as implementing a CAP under MTCA. Completion of a SEPA checklist may be required prior to initiating remedial construction activities.

Solid and Hazardous Waste Management. The Washington Dangerous Waste Regulations (Chapter 173-303 WAC) would apply if dangerous wastes are generated, and United States Department of Transportation (USDOT) and Washington State Department of Transportation (WSDOT) regulations regarding transport of hazardous materials (49 CFR Parts 171-180) would apply if regulated material is transported off-site as part of the cleanup action. The Washington Solid Waste Handling Standards (Chapter 173-350 WAC) regulate handling, treatment, or off-site disposal of nonhazardous solid waste.

Other:

- Occupational Safety and Health Administration (OSHA) and Washington Industrial Safety and Health Act (WISHA) regulations (29 CFR 1910.120; Chapter 296-62 WAC) governing worker safety during cleanup action execution. Compliance would be achieved through preparation and implementation of site-specific health and safety plan(s) with appropriate controls, worker training and certifications, and occupational monitoring.
- City of Tacoma and Pierce County regulations and codes include those related to methane mitigation. Compliance with the City and Pierce County requirements will be achieved through the permitting processes for the redevelopment construction.
- Washington State Water Well Construction Regulations (Chapter 173-160 WAC) regulating groundwater well installation and decommissioning as part of the cleanup action.

The Archeological and Historical Preservation Act (16 USCA 496a-1) would be applicable if any subject materials are discovered during grading and excavation activities. A cultural resources assessment and archeological oversight of subsurface disturbing activities may be required elements of the project.

6.3 Remedial Technologies Considered

This section presents the appropriate remedial technologies considered during development of the cleanup action alternatives for the Subject Property.

- **Capping.** Based on the RI data, contaminated fill soil is currently capped by non-contaminated fill soil. For development of the cleanup action alternatives, capping would consist of maintaining the existing non-contaminated fill soil cap overlying the Contaminated Soil Area, and/or modifying it to improve protectiveness such as by adding additional non-contaminated soil to increase the cap thickness, constructing hardscapes (asphalt or concrete pavement, or building foundations) at ground surface. In areas where hardscapes are not constructed, an isolation barrier (geotextile fabric) can be added to allow for a reduction in total cap thickness while still meeting the MTCA requirements for the protection of terrestrial ecological receptors and human receptors via direct contract. Capping will achieve the CAOs by limiting the current and potential future human and terrestrial ecological exposure to contaminated fill soil. Note that because of the elevated methane in soil vapor identified during the RI, utilizing a capping technology that involves hardscapes would also include methane exposure mitigation components, such as a subslab depressurization system (SSDS) and vapor barrier.
- **Source Removal (Contaminated Soil Excavation).** Source removal would consist of physical removal and off-Property disposal of contaminated fill soil. Source removal would meet the CAOs by permanently removing the source at the Subject Property. Standard excavation techniques would be used for source removal, although the large volume of material requiring removal and the proximity of the Contaminated Fill Area to adjoining rights-of-way would result in significant implementability issues and cost. Additionally, ground disturbance is not permitted in

the City Easement Area under the current easement, and excavation of the contaminated fill soil in this area would require significant coordination and negotiation of easement terms with the City. Contaminated fill soil removed from the Subject Property would be eligible for disposal at a Subtitle D landfill.

- **Institutional Controls.** Institutional Controls consist of measures that are not intended to physically alter the conditions at the Subject Property or reduce contamination, but involve administrative or engineered tools to limit potential exposure risk to contaminated fill soil. Those measures appropriate to meet the CAOs are recording a restrictive covenant on the Subject Property deed limiting land use or ground disturbance at the contaminated fill area.
- **Monitoring.** Monitoring is not a stand-alone technology but is a required element of any cleanup action conducted under MTCA. Monitoring would be conducted to ensure that the selected remedy meets the cleanup standards, both during the cleanup construction activities and after cleanup construction activities are completed. During cleanup construction activities, monitoring requirements may include soil sampling at the limits of contaminated fill soil excavation to document the quality of soil remaining in-place at the Subject Property and/or inspections during construction to document cap integrity and compliance with the design requirements. Post-cleanup construction monitoring requirements may include periodic inspections of the cap overlying contaminated fill soil.

The cleanup action alternatives, developed based on the list in this section, are described in Section 6.4.

6.4 Cleanup Action Alternatives

A description of the three cleanup alternatives evaluated for the FS are presented below. Alternatives are evaluated in Section 6.5.

1. **Alternative No. 1 – Institutional Controls Only**
   In Alternative 1, all contaminated fill soil remains in-place beneath the existing non-contaminated fill soil cap, the cap is not disturbed or modified, and residual contaminated fill soil is managed by maintenance of the existing soil cap, placement of physical barriers (fencing), and recording a restrictive covenant.

   Physical barriers would include fencing with signage around the perimeter of the contaminated fill soil area to discourage use of that portion of the Subject Property by human receptors that could lead to disturbance of the soil cap and/or contact with the underlying contaminated fill soil. An inspection, maintenance, and monitoring (IM&M) program would be required, and include periodic inspection of Subject Property conditions, maintenance of the soil cap performed on an as-needed basis, and periodic reporting of maintenance activities to Ecology, including 5-year reviews.

   The restrictive covenant would be recorded with the Subject Property deed and would restrict ground disturbance unless approved by Ecology in writing. Future structures would not be permissible within the Contaminated Fill Area.

   Future structures elsewhere on the Subject Property would require methane mitigation be incorporated into building design.

2. **Alternative No. 2 – Removal of Contaminated Fill Soil**
In Alternative 2, contaminated fill soil would be excavated and removed from the Subject Property for disposal at a Subtitle D Landfill. Soil, including both the non-contaminated overburden soil and the underlying contaminated fill soil, would be excavated in the Contaminated Fill Area (Figure 10) surrounding AB-06 extending north to the northern Subject Property line, west to the western Subject Property line, and east and south to AB-07, AGP-02, and AGP-01 at which soil samples showed contaminants were either not detected or detected below the cleanup levels during the RI. This area measures approximately 38,000 square feet. Excavation depth in this area would extend down to 15 feet bgs, the standard soil point of compliance for direct contact, resulting in approximately 21,111 cubic yards of contaminated fill soil for off-Property disposal.

   Compliance monitoring would be achieved by collecting confirmation soil samples at the excavation extents. The depth of the excavation, and proximity to the west-adjoining Pacific Avenue and the north-adjoining Harrison Street, would require installation of temporary shoring at the perimeter of the excavation. The excavation would include a portion of the City Easement Area, where City-owned utility lines are present, and would require coordination and easement negotiations with the City prior to excavation. To facilitate the planned Subject Property redevelopment, the excavation would then be backfilled with clean structural fill and compacted to restore ground surface so that building construction could begin. Because all contaminated fill at the Subject Property would be removed to the 15-foot point of compliance depth, cleanup levels would be met at the point of compliance and Alternative 2 would not require institutional controls or an IM&M program.

   Future structures constructed at the Subject Property would require methane mitigation be incorporated into building design, similar to Alternative 1.

3. **Alternative No. 3 – Capping & Institutional Controls**
For Alternative 3, the Contaminated Fill Area remains capped by the existing overlying non-impacted soil, and the Subject Property is redeveloped with construction of the new building, concrete pathways, and landscaping occurring over the top of the existing soil cap.

   The redevelopment requires that the ground surface be raised to match elevation of west-adjoining Pacific Avenue, requiring import and placement of clean fill soil that would be placed across the Subject Property, including over the soil cap within the Contaminated Fill Area. This would result in the soil cap at the Contaminated Fill Area increasing in thickness by 1 to 4 feet. After placement of imported clean fill soil, the redevelopment would continue with the construction of hardscape (building foundation, concrete walkways) and softscape (lawn, planting beds, and woodchips over geotextile barrier) components of the redevelopment. Alternative 3 includes no excavation of contaminated fill soil and therefore no costs for off-Property disposal of soil.

   Compliance monitoring would be achieved by performing inspections during placement of imported clean soil and construction of hardscapes and softscapes to ensure that redevelopment components constructed over the top of the existing soil

cap are constructed in accordance with the design requirements. Compliance soil sampling would not be performed because excavation into contaminated fill soil would not occur under Alternative 3. The contaminated fill soil would remain in-place beneath the soil cap, hardscapes, and softscapes; therefore, institutional controls and an IM&M program would be required under Alternative 3.

Future structures at the Subject Property would require methane mitigation be incorporated into building design, similar to Alternative 1 and 3.

6.5 Evaluation of Alternatives

The cleanup alternatives presented in Section 6.4 above are evaluated in this section with respect to MTCA criteria. The evaluation is accomplished by evaluating each alternative against cleanup action requirements and by cost-benefit analysis. In addition to MTCA criteria, the alternatives are also evaluated in the context of the planned change in Subject Property use associated with the redevelopment.

6.5.1 Description of Applicable MTCA Evaluation Criteria

Cleanup actions selected under MTCA must meet 10 general requirements, applicable action-specific requirements, and applicable media-specific requirements identified in WAC 173-340-360(3)(a), as follows:

- General Requirements:
  - Protect human health and the environment, including likely vulnerable populations and overburdened communities
  - Comply with cleanup standards
  - Comply with applicable state and federal laws
  - Prevent or minimize present and future releases and migration of hazardous substances in the environment
  - Provide resilience to climate change impacts that have a high likelihood of occurring and severely compromising its long-term effectiveness
  - Provide for compliance monitoring
  - Not rely primarily on institutional controls and monitoring at a site, or portion thereof, if it is technically possible to implement a more permanent action
  - Not rely primarily on dilution and dispersion[6]
  - Provide for a reasonable restoration timeframe
  - Use permanent solutions to the maximum extent practicable, as determined by evaluating the following criteria specified in WAC 173-340-360(5)(d):
    - Protectiveness

[6] WAC 173-340-360(3)(a) indicates “unless the incremental costs of any active remedial measures over the costs of dilution and dispersion grossly exceed the incremental degree of benefits of active remedial measures over the benefits of dilution and dispersion.”

- Permanence
- Long-term effectiveness
- Management of Implementation Risks
- Implementability

Cleanup actions must also meet action- and media-specific requirements, as applicable. The action-specific requirements applicable to the Subject Property include:

- Use of remediation levels in accordance with WAC 173-340-355
- Use of institutional controls in accordance with WAC 173-340-440
- Provision of financial assurance in accordance with WAC 173-340-440(11)
- Provision for periodic reviews in accordance with WAC 173-340-420(2)

The media-specific requirement applicable to the Subject Property indicates that a soil cleanup action must treat, remove, or contain contaminated soils located on properties that qualify as a potential future residential area.

6.5.2 MTCA Criteria Evaluation

In this section, each of the three alternatives described in Section 6.4 are evaluated relative to the criteria listed in Section 6.5.1. In accordance with WAC 173-340-351(5)(a), the cleanup alternatives are initially screened and those alternatives that do not meet the cleanup requirements in WAC 173-340-360 (described in Section 5.5.1) or are not technically possible are eliminated from further evaluation. Additionally, given the planned redevelopment for the Subject Property, the initial screening also considers each alternative's compatibility with the planned change in use of the Subject Property. The initial screening indicates the following:

- **Alternative 1** relies completely on institutional controls and monitoring and therefore does not meet the cleanup requirement under WAC 173-340-360(3)(a)(vii). Alternative 1 also requires no future ground disturbance within the Contaminated Fill Area and therefore is not compatible with the planned redevelopment and change in Subject Property use. For these reasons, Alternative 1 is eliminated at the initial screening phase and not further evaluated.

Alternatives 2 and 3 meet the requirements for cleanup action in WAC 173-340-360, are technically possible, and are compatible with the planned redevelopment, therefore both are carried forward for evaluation.

Alternatives 2 and 3 are evaluated against each of the applicable MTCA criteria listed in Section 6.5.1 in Table 4. Note that both Alternatives 2 and 3 include the same methane mitigation components to the building design. Therefore, the primary differences in implementation costs for Alternatives 2 and 3 are related to excavation and disposal of contaminated fill soil in Alternative 2 versus leaving contaminated soil in-place managed by environmental covenant in Alternative 3. In summary:

- **Alternative 2** meets each of the 10 general MTCA criteria (Section 6.5.1) and is permanent to the maximum extent practicable. The relative MTCA Benefits Ranking

for Alternative 2 is 41. The incremental cost for implementing Alternative 2 is estimated as $7.47M, based on the excavation and soil disposal related components of this alternative, which are the primary differences between Alternative 2 and Alternative 3. The excavation components of Alternative 2 would include excavation and off-Property disposal, installation of temporary shoring, and restoring ground surface to facilitate the redevelopment, as follows:

- Excavation of the contaminated fill area to 15 feet bgs would result in a total of 21,111 cubic yards or 35,889 tons of soil requiring disposal at a Subtitle D Landfill, resulting in a soil excavation, loading, transport, and disposal cost of approximately $4.13M[7].
- Temporary shoring at the perimeter of the excavation would be required, and would consist of cantilever soldier piles and timber lagging, at a cost of approximately $1.73M[8].
- Import, placement, and compaction of clean fill soil to restore ground surface at an estimated cost of approximately $1.61M[9].

As discussed in Section 6.4, Alternative 2 would not require an environmental covenant or an IM&M program. The methane mitigation would be the same as Alternative 3, so the cost for methane mitigation is not an incremental cost for comparing Alternatives 2 and 3 and is not included this total.

- **Alternative 3** also meets each of the 10 general MTCA criteria, with a slightly higher relative MTCA Benefits Ranking of 43. Alternative 3 does not include excavation and off-Property disposal, so the incremental cost of implementing Alternative 3 is for the institutional controls (environmental covenant) and IM&M components of this alternative, since the cap construction would occur as part of the planned redevelopment. The incremental cost of implementing Alternative 3 is $50,000[10]. As discussed in Section 6.4, Alternative 3 includes the same methane mitigation as Alternative 2, therefore the cost for methane mitigation is not an incremental cost for comparing Alternatives 2 and 3 and is not included in this total.

Based on the qualitative evaluation of the benefits to costs of Alternatives 2 and 3 described above, the cost to benefit for implementing Alternative 2 is considered clearly disproportionate under WAC 173-340-360(5); therefore, Alternative 2 is eliminated from

[7] The volume and cost estimate for Alternative 2 assume that the contaminated fill soil area measures 38,000 square feet. Excavation to 15 feet bgs would result in 21,111 cubic yards, or 35,889 tons using a conversion factor of 1.7. Off-Property disposal cost per ton is based on loading, transport, and tipping fees at Waste Management's Wenatchee Regional Landfill, estimated at $115/ton based on other recent project experience.

[8] Alternative 2 assumes that the perimeter of the excavation measures 770 feet, resulting in the exposed square footage of the temporary shoring system measuring 11,550 square feet. Costs related to installation of temporary shoring are estimated at $150/exposed square foot based on other recent project experience.

[9] To restore ground surface, Alternative 2 assumes that 35,889 tons of clean fill is imported, placed, and compacted after the excavation, at an estimated cost of $45/ton based on other recent project experience.

[10] The cost estimate for Alternative 3 includes recording the environmental covenant and implementing the IM&M Plan, estimated for 20 years of monitoring. Costs are based on other recent project experience.

further evaluation per WAC 173-340-351(6)(c)(i) and a detailed and quantitative disproportionate cost analysis is not warranted to select Alternative 3 as the recommended alternative.

6.6 FS Findings & Recommendation

Based on the alternative evaluation in Section 6.5 and Table 4, Alternative 3 has the higher MTCA Benefits Ranking, a substantially lower cost relative to Alternative 2, and is directly compatible with the planned redevelopment of the Subject Property. For these reasons, Alternative 3 is the recommended alternative.

7 Cleanup Action Plan

The CAP describes the cleanup action selected for the Project, based on the results of the FS described in Section 6. A CAP is a required part of the site cleanup process under Chapter 173-340 WAC, MTCA Cleanup Regulations. The purpose of the CAP is to describe the components of the cleanup action, the restoration timeframe, and the schedule for implementation.

7.1 Area Requiring Cleanup

Based on the results of the RI/FS, the area requiring cleanup at the Subject Property is the area surrounding AB-06 where cPAHs are present in fill soil exceeding the cleanup levels between 7 and 28 feet bgs, referred to in this report as the Contaminated Fill Area. This area extends north and west of AB-06 to the Subject Property boundary, and east and south of AB-06 to explorations AB-07, AGP-02, and AGP-01 where contaminants were not detected or detected below cleanup levels. The area measures approximately 38,000 square feet, as shown on Figure 10.

The RI data also shows that methane gas is present in soil gas at the Subject Property, periodically at concentrations exceeding the LEL of 5 percent by volume. Methane is not a hazardous substance regulated by MTCA, but poses an exposure risk if it collects beneath structures or in subsurface vaults/features, or enters buildings. Therefore, the presence of methane gas at the Subject Property is also addressed in this CAP. Methane mitigation is likely needed in all areas of the Subject Property where hardscapes will be present after redevelopment, and subsurface utility vaults that may need to be accessed by workers after redevelopment. Note that subsurface utilities could also act as preferential pathways for methane.

7.2 Description of Cleanup Action

The cleanup action consists of maintaining the existing soil cap overlying contaminated fill soil, then redevelopment of the Subject Property, implementation of institutional controls, and an IM&M program. Details regarding the redevelopment, such as the volume of clean structural fill needed and the thicknesses of the building foundation, concrete walkways, topsoil, and wood chips, are estimates based on preliminary design plans and may be changed as the design is refined and permits are obtained. Figure 10

shows the preliminary conceptual design for the redevelopment relative to the Contaminated Fill Area.

- **Soil Cap**. The RI data indicates that the Contaminated Soil Area is currently capped by 7-feet of non-contaminated soil. The cleanup action will maintain the existing cap, with additions constructed on top of the cap to facilitate redevelopment, as follows:
  - **Increased Cap Thickness**. The redevelopment requires raising the ground surface to match Pacific Avenue; therefore, clean structural fill soil will be placed on top of the existing soil cap to raise the ground surface to match the elevation of west-adjoining Pacific Avenue. The clean structural fill placed on top of the cap may consist of approximately 10,000 cubic yards of non-contaminated fill imported to the Subject Property. Following placement, the ground surface will be raised by 1 to 4 feet across the Subject Property, resulting in the existing cap overlying the Contaminated Fill Area to increase in thickness to approximately 10 feet thick.
  - **Addition of Hardscapes**. The planned redevelopment includes construction of hardscapes consisting of concrete walkways and the new building's concrete foundation, and both are planned for portions of the Contaminated Fill Area (see Figure 10). The concrete building foundation will measure up to 4 inches thick and the concrete walkways will measure up to 4 inches thick. Within the Contaminated Fill Area, hardscapes may be constructed across 18,200 square feet of the soil cap based on preliminary design plans (Figure 10).
  - **Addition of Softscapes with Geotextile Barrier**. For areas not occupied by hardscapes, the planned redevelopment includes softscapes consisting of lawn and planting beds and a playground area with wood playchips. All softscape areas within the Contaminated Fill Area will be constructed with a geotextile barrier[11] first placed on top of the soil cap. In the playground area, up to 8 inches of playchips will be placed over the geotextile barrier. In landscaping areas, at up to 8 inches of topsoil will be placed over the geotextile barrier and finished with hydroseed (for lawn areas) or mulch (for planting beds). Trees, shrubs, and groundcover plants are planned for the planting beds. Within the Contaminated Fill Area, softscapes may be constructed across 19,800 square feet of the soil cap, with 17,100 square feet being landscaping and 2,700 square feet being the playchips, based on preliminary design plans (Figure 10).
- **Institutional Controls**. Institutional controls will include an environmental covenant deed restriction to prevent future unrestricted development or any other activities that could create exposure pathways for direct contact with the contaminated fill soil. The environmental covenant will specifically apply to the Contaminated Fill Area, shown on Figure 10. Institutional controls are required *in perpetuity*.
- **Post-Construction Monitoring**. The IM&M program will include the following:

[11] The geotextile produce should conform to Standard Specification 9-33.2(1) Table 3 – *Geotextile for Separation or Soil Stabilization* classification of Woven Separation material, such as the Winfab HP line of products (or similar).

- Periodic inspection of the condition of the soil cap, hardscapes, and softscapes within the Contaminated Fill Area.
- Maintenance of the soil cap, hardscapes, and softscapes if needed.
- Periodic reporting of IM&M activities to Ecology, including 5-year reviews.

A methane mitigation system will also be constructed concurrently with the construction of the new building, to include:

- **Subslab Depressurization System (SSDS)**. To mitigate the risk of methane gas collecting beneath the new building, a SSDS will be incorporated into the building design. The SSDS will consist of perforated piping (such as Schedule 40 PVC) installed below the building foundation slab in the permeable substrate and will be connected to nonperforated header pipes that will vent into atmospheric air above the roofline of the building. The SSDS can be designed to operate passively but allowing for conversion to active ventilation by addition of a blower, if warranted. Since subsurface utility lines may act as preferential pathways for methane, low permeability dams may be installed in the utility trenches where they enter the new building.
- **Vapor Barrier**. A vapor barrier will be installed below the building, consisting of a pre-applied product(s) with documented resistance to methane gas. The vapor barrier will be integrated into the building design plans, including specifying the connection and termination details, and the sealing requirements around any penetrations required for utilities, structural support, or other foundation elements.

The cleanup action will be implemented as a voluntary action through Ecology's Voluntary Cleanup Program (VCP) with the goal of receiving a Property-Specific NFA opinion from Ecology.

7.3 Restoration Timeframe

Cleanup will be achieved upon construction of all components of the cap, including the hardscapes (concrete walkways, building foundation) and softscapes (landscaping, lawn, and playground areas), and recording the Final Environmental Covenant on the Subject Property deed. The cleanup action is anticipated to be completed in under 18 months from the start of construction activities, which is considered a reasonable timeframe in accordance with the factors listed in WAC 173-340-360(5)(d). The methane mitigation system will be considered complete following construction of the SSDS, vapor barrier, and verification testing of the methane mitigation system, which is anticipated to be completed within 24 months from the start of construction activities.

7.4 Implementation and Schedule

The cleanup action will be implemented concurrently with redevelopment construction at the Subject Property, and post-cleanup monitoring will commence following completion of the cleanup action construction, as described in the following sections.

7.4.1 Cleanup Action Construction

The implementation of the cleanup action will begin concurrently with the start of excavation and grading activities related to the redevelopment construction, which is anticipated to begin in Third Quarter 2025.

The cleanup action construction will be completed when all of the hardscapes (asphalt pavement, building foundation) and softscapes (landscaping) are completed, anticipated to occur in Second Quarter 2027.

The completed cleanup action will be documented in the Cleanup Action Report, to be prepared following completion of the cleanup action, and is anticipated to be provided to Ecology's Expedited VCP in Fourth Quarter 2027. The submittal to Ecology will also include uploading all environmental data to the Environmental Information Management (EIM) system, and a request for NFA opinion from Ecology.

7.4.2 Institutional Controls

The institutional controls for the cleanup action include an environmental covenant in the form of a deed restriction. The draft environmental covenant is being developed concurrently with preparation of this CAP and will be submitted for Ecology review separately. Following approval by Ecology, the Final Environmental Covenant will be recorded with the property deed.

7.4.3 Monitoring and Periodic Review

Long-term inspection, maintenance, and monitoring of the cleanup action will occur after cleanup action construction is completed as needed and not to exceed 5-year intervals, in accordance with the IM&M Plan. The IM&M Plan provides the details and specifications for inspection, maintenance, and repair of the soil cap, hardscapes, and softscapes overlying the contaminated fill soil. Additional discussion will be presented in the IM&M Plan that will be submitted for Ecology review separately.

In accordance with WAC 173-340-420, at a site where a cleanup action requires an institutional control, Ecology will conduct a review of the Site every 5 years to ensure the continued protection of human health and the environment. Since the contaminated fill soil will remain onsite below the soil cap, and institutional controls will be required, periodic reviews will occur to assess the long-term effectiveness of the cleanup action. The 5-year inspections conducted under the IM&M Plan described above can occur on the same schedule as the 5-year periodic reviews.

8 References

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9 Limitations

Work for this project was performed for the Mercy Housing Northwest (Client), and this report was prepared in accordance with generally accepted professional practices for the nature and conditions of work completed in the same or similar localities, at the time the work was performed. This report does not represent a legal opinion. No other warranty, expressed or implied, is made.

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Please refer to Appendix F titled "Report Limitations and Guidelines for Use" for additional information governing the use of this report.

TABLES

Table 1. Soil Analytical Results - Detections Only

Project No. AS220138B, 35P Affordable Housing Development, Tacoma, Washington

				BTEX				Metals						Other Semi-Volatile Organic Compounds (SVOCs)		Petroleum Hydrocarbons			
Location	Sample	Date	Depth	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Total Xylenes mg/kg	Arsenic mg/kg	Barium mg/kg	Chromium mg/kg	Lead mg/kg	Mercury mg/kg	Chromium (VI) mg/kg	Carbazole mg/kg	Dibenzofuran mg/kg	Gasoline Range Organics mg/kg	Diesel Range Organics mg/kg	Motor Oil Range Organics mg/kg	Diesel and Oil Extended Range Organics mg/kg
MTCA A Cleanup Level				**0.03**	**7**	**6**	**9**	**20**		**2000**	**250**	**2**	**19**			**30**	**2000**	**2000**	**2000**
On-Property Explorations																			
AB-01	AB-01-2.5	03/18/2025	2.5 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2**	**36**	**12**	**1.9**	< 1 U	--	--	--	< 5 U	< 50 U	< 250 U	< 250 U
	AB-01-10	03/18/2025	10 ft	< 0.002 U	**0.0052**	< 0.002 U	< 0.004 U	**3.7**	**57**	**35**	**4.5**	< 1 U	--	--	--	**8.1**	**120**	**730**	**850**
	AB-01-13	03/18/2025	13 ft	< 0.002 U	**0.007 J**	< 0.002 U	< 0.004 U	**1.4**	**44**	**14**	**2.1 J**	< 1 U	--	--	--	< 5 U	< 50 U	< 250 U	< 250 U
	AB-101-13	03/18/2025	13 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2**	**59**	**17**	**4**	< 1 U	--	--	--	< 5 U	< 50 U	< 250 U	< 250 U
AB-02	AB-02-2	03/17/2025	2 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**3.5**	**61**	**21**	**16**	< 1 U	--	--	--	< 5 U	< 50 U	< 250 U	< 250 U
	AB-02-5	03/17/2025	5 ft	< 0.002 U	**0.019**	< 0.002 U	< 0.004 U	**3**	**59**	**21**	**22**	< 1 U	--	--	--	< 5 U	< 50 U	< 250 U	< 250 U
	AB-02-13	03/17/2025	13 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2.1**	**27**	**8.5**	**1.8**	< 1 U	--	--	--	< 5 U	< 50 U	< 250 U	< 250 U
AB-06	AB-06-1.5	01/09/2025	1.5 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2.9**	**46**	**13**	**17**	< 1 U	--	**0.0028**	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-06-7	01/09/2025	7 ft	< 0.002 U	**0.0078**	< 0.002 U	< 0.004 U	**4.6**	**53**	**20**	**19**	< 1 U	--	**0.4**	**0.36**	< 5 U	< 50 U	< 250 U	< 250 U
	AB-06-11.5	01/09/2025	11.5 ft	< 0.002 U	**0.0034**	< 0.002 U	< 0.004 U	**3.3**	**64**	**15**	**11**	< 1 U	--	**0.003**	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-06-17	01/09/2025	17 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2.7**	**38**	**15**	**2.5**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-06-19	01/09/2025	19 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2.3**	**29**	**10**	**2.2**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-06-28	01/09/2025	28 ft	< 0.002 U	**0.0027**	< 0.002 U	< 0.004 U	**3.2**	**62**	**12**	**43**	< 1 U	--	**0.057**	< 0.05 U	< 5 U	**260 X**	**1100**	**1360 X**
	AB-06-33	01/09/2025	33 ft	**0.013**	**0.019**	**0.0058**	**0.0128**	**2**	**110**	**33**	**4.2**	**1.6**	**1.52**	**0.0047**	**0.026**	< 5 U	< 50 U	< 250 U	< 250 U
	AB-06-42	01/09/2025	42 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2.1**	**29**	**12**	**1.6**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-06-48	01/09/2025	48 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2**	**33**	**12**	**1.8**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-06-57	01/09/2025	57 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2.4**	**42**	**13**	**2**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-06-67.5	01/10/2025	67.5 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2.1**	**38**	**9.9**	**1.7**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-06-79	01/10/2025	79 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**1.3**	**28**	**13**	**1.6**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
AB-07	AB-07-3	01/13/2025	3 ft	< 0.002 UJ	< 0.002 UJ	< 0.002 UJ	< 0.004 UJ	**1.8**	**30**	**12**	**5.9**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-07-7	01/13/2025	7 ft	< 0.002 UJ	< 0.002 UJ	< 0.002 UJ	< 0.004 UJ	**1.7**	**33**	**12**	**2.2**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-07-12	01/13/2025	12 ft	< 0.002 UJ	< 0.002 UJ	< 0.002 UJ	< 0.004 UJ	**2.1**	**45**	**14**	**4.2**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-07-17.5	01/13/2025	17.5 ft	< 0.002 UJ	< 0.002 UJ	< 0.002 UJ	< 0.004 UJ	**2**	**42**	**22**	**4.5**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-07-27.5	01/14/2025	27.5 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**1.3**	**41**	**7.9**	**1.8**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-07-37	01/14/2025	37 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2**	**38**	**14**	**3**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-07-42	01/14/2025	42 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2.3**	**45**	**19**	**3**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-102-42	01/14/2025	42 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2.4**	**49**	**18**	**3.2**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-07-57.5	01/14/2025	57.5 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**1.9**	**45**	**18**	**2.2**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-07-63	01/14/2025	63 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2**	**42**	**18**	**4.1**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-07-72.5	01/15/2025	72.5 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**1.9**	**32**	**17**	**2**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-07-84	01/15/2025	84 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2.5**	**45**	**14**	**2.2**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-07-107.5	01/16/2025	107.5 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2**	**34**	**15**	**3**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
AGP-01	AGP-01-2	03/17/2025	2 - 2 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**4.4**	**59**	**11**	**8.3**	< 1 U	--	--	--	< 5 U	< 50 U	< 250 U	< 250 U
	AGP-01-7.5	03/17/2025	7.5 ft	< 0.002 U	**0.0056**	< 0.002 U	< 0.004 U	**2.9**	**44**	**10**	**28**	< 1 U	--	--	--	< 5 U	< 50 U	< 250 U	< 250 U
	AGP-01-12.5	03/17/2025	12.5 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**3**	**59**	**18**	**4.4**	< 1 U	--	--	--	< 5 U	< 50 U	< 250 U	< 250 U
AGP-02	AGP-02-1.5	03/18/2025	1.5 ft	< 0.002 U	**0.022**	< 0.002 U	< 0.004 U	**4.6**	**56**	**17**	**18**	< 1 U	--	--	--	< 5 U	< 50 U	< 250 U	< 250 U
	AGP-02-8	03/18/2025	8 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2.1**	**36**	**16**	**3.7**	< 1 U	--	--	--	< 5 U	< 50 U	< 250 U	< 250 U
	AGP-02-12.5	03/18/2025	12.5 ft	< 0.002 U	**0.0053**	< 0.002 U	< 0.004 U	**2.4**	**40**	**14**	**2**	< 1 U	--	--	--	< 5 U	< 50 U	< 250 U	< 250 U
AGP-03	AGP-03-2	03/17/2025	2 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**3.8**	**51**	**8.8**	**4.9**	< 1 U	--	--	--	< 5 U	< 50 U	< 250 U	< 250 U
	AGP-101-10	03/17/2025	10 ft	< 0.002 U	**0.0059**	< 0.002 U	< 0.004 U	**3.3**	**45**	**16**	**3.2**	< 1 U	--	--	--	< 5 U	< 50 U	< 250 U	< 250 U
	AGP-03-10	03/17/2025	10 ft	< 0.002 U	**0.0058**	< 0.002 U	< 0.004 U	**2.8**	**39**	**12**	**2 J**	< 1 U	--	--	--	< 5 U	< 50 U	< 250 U	< 250 U
	AGP-03-12.5	03/17/2025	12.5 ft	< 0.002 U	**0.0057**	< 0.002 U	< 0.004 U	**2.8**	**50**	**17**	**16**	< 1 U	--	--	--	< 5 U	< 50 U	< 250 U	< 250 U

Table 1. Soil Analytical Results - Detections Only

Project No. AS220138B, 35P Affordable Housing Development, Tacoma, Washington

				BTEX				Metals						Other Semi-Volatile Organic Compounds (SVOCs)		Petroleum Hydrocarbons			
Location	Sample	Date	Depth	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Total Xylenes mg/kg	Arsenic mg/kg	Barium mg/kg	Chromium mg/kg	Lead mg/kg	Mercury mg/kg	Chromium (VI) mg/kg	Carbazole mg/kg	Dibenzofuran mg/kg	Gasoline Range Organics mg/kg	Diesel Range Organics mg/kg	Motor Oil Range Organics mg/kg	Diesel and Oil Extended Range Organics mg/kg
MTCA A Cleanup Level				**0.03**	**7**	**6**	**9**	**20**		**2000**	**250**	**2**	**19**			**30**	**2000**	**2000**	**2000**
AMW-04	AMW-04-1.5	01/17/2025	1.5 ft	< 0.002 U	**0.019**	< 0.002 U	< 0.004 U	**2.5**	**60**	**18**	**4.5**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AMW-04-7	01/17/2025	7 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2**	**37**	**16**	**3.3**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AMW-04-37	01/20/2025	37 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2.3**	**63**	**21**	**6.4**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AMW-04-49	01/20/2025	49 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**1.8**	**30**	**12**	**3.9**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AMW-04-56.5	01/21/2025	56.5 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**3.3**	**47**	**18**	**3.4**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AMW-04-70	01/21/2025	70 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**1.7**	**41**	**21**	**3.8**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AMW-103-89	01/21/2025	89 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**3.3**	**78**	**34**	**5.4**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AMW-04-89	01/21/2025	89 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**5.2**	**98**	**45**	**7.1**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AMW-04-92	01/21/2025	92 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**1.9**	**30**	**12**	**2.1**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
TP-1	Pit 1: 0-5 in	2018	0-5 in	--	--	--	--	**5.2**	**57.4**	**30.3**	**7.4**	< 0.05 U	--	--	--	< 20 U	< 50 U	< 100 U	< 100 U
TP-3	Pit 3: 9-11 in	2018	9-11 in	--	--	--	--	< 2.5 U	**37.6**	**20.8**	< 2.5 U	**1.13**	--	--	--	< 20 U	< 50 U	< 100 U	< 100 U
TP-4	Pit 4: 0-2 in	2018	0-2 in	--	--	--	--	< 2.5 U	**41**	**20.2**	**2.5**	< 0.05 U	--	--	--	< 20 U	< 50 U	< 100 U	< 100 U
TP-5	Pit 5: 14-15 ft	2018	14-15 ft	--	--	--	--	< 2.5 U	**37.6**	**20.8**	**2.5**	< 0.05 U	--	--	--	< 20 U	< 50 U	< 100 U	< 100 U
TP-6	Pit 6: 0-5 in	2018	0-5 in	--	--	--	--	**8.5**	**68.2**	**35.8**	**35.0**	**0.06**	--	--	--	< 20 U	< 50 U	< 100 U	< 100 U
TP-7	Pit 7: 9-10 ft	2018	9-10 ft	--	--	--	--	**5.4**	**79.4**	**37.2**	**27.6**	**0.05**	--	--	--	< 20 U	< 50 U	< 100 U	< 100 U
TP-9	Pit 9: 0-5 in	2018	0-5 in	--	--	--	--	< 2.5 U	**29**	**21.8**	**5.0**	< 0.05 U	--	--	--	< 20 U	< 50 U	< 100 U	< 100 U
TP-10	Pit 10: 0-2 ft	2018	0-2 ft	--	--	--	--	**5.0**	**71.6**	**24.2**	**24.4**	**0.05**	--	--	--	< 20 U	< 50 U	**65**	**65**
TP-10	Pit 10: 10-11 ft	2018	10-11 ft	--	--	--	--	**4.4**	**77.4**	**34.4**	**32.2**	< 0.05 U	--	--	--	< 20 U	< 50 U	< 100 U	< 100 U
TP-11	Pit 11: 0-5 in	2018	0-5 in	--	--	--	--	< 2.5 U	**49.4**	**19.8**	**4.4**	< 0.05 U	--	--	--	< 20 U	< 50 U	< 100 U	< 100 U
Off-Property Explorations (Harrison Street ROW)																			
AB-08	AB-08-2.5	01/06/2025	2.5 ft	< 0.002 U	**0.0054**	< 0.002 U	< 0.004 U	**3.4**	**72**	**18 J**	**45**	< 1 U	--	< 0.012 U	< 0.012 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-08-6	01/06/2025	6 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**7.8**	**64**	**17**	**92**	< 1 U	--	< 0.025 U	< 0.025 U	< 5 U	**79 X**	**1100**	**1180 X**
	AB-08-12	01/06/2025	12 ft	**0.0053**	**0.015**	< 0.002 U	**0.0114**	**5.3**	**58**	**22**	**15**	< 1 U	--	< 0.012 U	< 0.012 U	< 5 U	< 50 U	**370**	**370**
	AB-08-17	01/06/2025	17 ft	**0.047**	**0.058**	**0.061**	**0.44**	**2.9**	**33**	**11**	**6.5**	< 1 U	--	< 0.025 U	< 0.025 U	< 5 U	< 50 U	**720**	**720**
	AB-08-25	01/06/2025	25 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**3.2**	**57**	**23**	**3.6**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-08-32.5	01/07/2025	32.5 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2.5**	**26**	**11**	**2.8**	< 1 U	--	< 0.0025 U	**0.0041**	< 5 U	< 50 U	< 250 U	< 250 U
	AB-08-47.5	01/07/2025	47.5 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2.1**	**36**	**12**	**2.5**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-101-54	01/07/2025	54 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**3**	**38**	**17**	**7.2**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-08-54	01/07/2025	54 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2.7**	**46**	**27**	**2.9**	< 1 U	--	< 0.0025 U	**0.0048**	< 5 U	< 50 U	< 250 U	< 250 U
	AB-08-67	01/07/2025	67 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2.2**	**47**	**12**	**2.1**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-08-77	01/08/2025	77 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2**	**37**	**12**	**2.2**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-08-83	01/08/2025	83 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**2.8**	**44**	**23**	**2.1**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U
	AB-08-85	01/08/2025	85 ft	< 0.002 U	< 0.002 U	< 0.002 U	< 0.004 U	**3.5**	**45**	**19**	**2.3**	< 1 U	--	< 0.0025 U	< 0.0025 U	< 5 U	< 50 U	< 250 U	< 250 U

Bold - detected

Blue Shaded - Detected result exceeds Model Toxics Control Act (MTCA) Method A cleanup level for unrestricted use.

U - Analyte not detected at or above Reporting Limit (RL) shown

J - Result value estimated
UJ - Analyte not detected and the Reporting Limit (RL) is an estimate
X - Chromatographic pattern does not match fuel standard used
TEQ - Toxic Equivalence Quotient (Calculated sum of)
cPAHs - carcinogenic polycyclic aromatic hydrocarbons
mg/kg - milligrams per kilogram

Table 1. Soil Analytical Results - Detections Only

Project No. AS220138B, 35P Affordable Housing Development, Tacoma, Washington

Location	Sample	Date	Depth	Polycyclic Aromatic Hydrocarbons (PAHs)																	Other Volatile Organic Compounds (VOCs)			
				1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Anthracene	Benzo(g,h,i)perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Total cPAHs TEQ (ND = 1/2 RDL)	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m,p-Xylenes	o-Xylene
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
MTCA A Cleanup Level											5				0.1						0.1				
On-Property Explorations																									
AB-01	AB-01-2.5	03/18/2025	2.5 ft	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-01-10	03/18/2025	10 ft	**0.21**	**0.15**	**0.053**	< 0.005 U	**0.037**	**0.031**	**0.091**	**0.016**	**0.21**	**0.076**	**0.03**	**0.022**	**0.032**	< 0.005 U	**0.18**	< 0.005 U	< 0.005 U	**0.0308**	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-01-13	03/18/2025	13 ft	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-101-13	03/18/2025	13 ft	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	**0.0094**	**0.012**	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	**0.0062**	< 0.005 U	< 0.005 U	**0.00381**	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
AB-02	AB-02-2	03/17/2025	2 ft	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	**0.0064**	< 0.005 U	< 0.005 U	< 0.005 U	**0.0051**	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-02-5	03/17/2025	5 ft	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	**0.017**	**0.032**	< 0.005 U	< 0.005 U	**0.01**	**0.023**	**0.014**	**0.015**	**0.02**	**0.0073**	**0.018**	< 0.005 U	**0.012**	**0.0208**	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-02-13	03/17/2025	13 ft	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
AB-06	AB-06-1.5	01/09/2025	1.5 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	**0.003**	**0.02**	**0.055**	< 0.0025 U	< 0.005 U	**0.019**	**0.043**	**0.024**	**0.031**	**0.042**	**0.015**	**0.03**	< 0.005 U	**0.018**	**0.0415**	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-06-7	01/09/2025	7 ft	**0.065**	**0.1**	**0.76**	**0.99**	**0.45**	**2.8**	**0.54**	**0.23**	**3.5**	**2.4**	**1**	**0.88**	**0.94**	**0.38**	**0.98**	**0.085**	**0.42**	**1.17**	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-06-11.5	01/09/2025	11.5 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	**0.0048**	**0.019**	**0.059**	**0.003**	< 0.005 U	**0.048**	**0.071**	**0.028**	**0.034**	**0.038**	**0.014**	**0.04**	< 0.005 U	**0.016**	**0.0443**	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-06-17	01/09/2025	17 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-06-19	01/09/2025	19 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-06-28	01/09/2025	28 ft	< 0.05 U	< 0.05 U	**0.076**	**0.11**	**0.15**	**0.41**	**0.062**	< 0.01 U	**0.61**	**0.42**	**0.17**	**0.16**	**0.16**	**0.054**	**0.18**	< 0.1 U	< 0.1 U	**0.21**	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-06-33	01/09/2025	33 ft	**0.012**	**0.018**	**0.028**	**0.013**	< 0.005 U	**0.071**	**0.033**	**0.062**	**0.13**	**0.04**	**0.0099**	**0.0034**	**0.0089**	< 0.0025 U	**0.013**	< 0.005 U	< 0.005 U	**0.00604**	< 0.05 U	< 0.05 U	**0.0052**	**0.0076**
	AB-06-42	01/09/2025	42 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-06-48	01/09/2025	48 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-06-57	01/09/2025	57 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-06-67.5	01/10/2025	67.5 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-06-79	01/10/2025	79 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
AB-07	AB-07-3	01/13/2025	3 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	**0.0067**	< 0.0025 U	< 0.005 U	**0.0042**	**0.0071 J**	< 0.005 U	**0.0046**	**0.0054**	< 0.0025 U	**0.004**	< 0.005 U	< 0.005 U	**0.00606**	< 0.05 UJ	< 0.05 UJ	< 0.004 UJ	< 0.002 UJ
	AB-07-7	01/13/2025	7 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 UJ	< 0.05 UJ	< 0.004 UJ	< 0.002 UJ
	AB-07-12	01/13/2025	12 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	**0.0045**	< 0.0025 U	< 0.005 U	**0.006**	**0.0053**	< 0.005 U	< 0.0025 U	**0.0027**	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	**0.00241**	< 0.05 UJ	< 0.05 UJ	< 0.004 UJ	< 0.002 UJ
	AB-07-17.5	01/13/2025	17.5 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	**0.0038**	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 UJ	< 0.05 UJ	< 0.004 UJ	< 0.002 UJ
	AB-07-27.5	01/14/2025	27.5 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	**0.0029**	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-07-37	01/14/2025	37 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-07-42	01/14/2025	42 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	**0.0029**	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-102-42	01/14/2025	42 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-07-57.5	01/14/2025	57.5 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-07-63	01/14/2025	63 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	**0.0037**	< 0.0025 U	< 0.005 U	**0.0033**	**0.0041**	< 0.005 U	< 0.0025 U	**0.0026**	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	**0.0024**	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-07-72.5	01/15/2025	72.5 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-07-84	01/15/2025	84 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-07-107.5	01/16/2025	107.5 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	--	< 0.05 U	< 0.004 U	< 0.002 U
AGP-01	AGP-01-2	03/17/2025	2 - 2 ft	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	**0.011**	**0.0092**	< 0.005 U	< 0.005 U	**0.005**	**0.0083**	< 0.005 U	**0.0059**	**0.0091**	< 0.005 U	**0.0081**	< 0.005 U	< 0.005 U	**0.00789**	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AGP-01-7.5	03/17/2025	7.5 ft	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	**0.017**	**0.017**	< 0.005 U	< 0.005 U	**0.014**	**0.021**	**0.0092**	**0.011**	**0.013**	< 0.005 U	**0.012**	< 0.005 U	**0.0086**	**0.0147**	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AGP-01-12.5	03/17/2025	12.5 ft	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	**0.0077**	< 0.005 U	< 0.005 U	< 0.005 U	**0.0079**	< 0.005 U	< 0.005 U	**0.005**	< 0.005 U	**0.0052**	< 0.005 U	< 0.005 U	**0.00405**	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
AGP-02	AGP-02-1.5	03/18/2025	1.5 ft	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	**0.013**	**0.016**	< 0.005 U	< 0.005 U	**0.013**	**0.014**	< 0.005 U	**0.0071**	**0.012**	< 0.005 U	**0.018**	< 0.005 U	**0.0098**	**0.0102**	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AGP-02-8	03/18/2025	8 ft	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AGP-02-12.5	03/18/2025	12.5 ft	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
AGP-03	AGP-03-2	03/17/2025	2 ft	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	**0.0099**	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	**0.0066**	< 0.005 U	**0.011**	< 0.005 U	< 0.005 U	**0.00427**	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AGP-101-10	03/17/2025	10 ft	**0.0062**	**0.0064**	< 0.005 U	< 0.005 U	**0.017**	**0.022**	< 0.005 U	< 0.005 U	**0.035**	**0.025**	**0.0092**	**0.011**	**0.014**	< 0.005 U	**0.034**	**0.0056**	**0.0071**	**0.0152**	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AGP-03-10	03/17/2025	10 ft	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AGP-03-12.5	03/17/2025	12.5 ft	< 0.005 U	< 0.005 U	< 0.005 U	**0.0053**	**0.0059**	**0.02**	< 0.005 U	< 0.005 U	**0.02**	**0.024**	**0.006**	**0.0071**	**0.0081**	< 0.005 U	**0.011**	< 0.005 U	< 0.005 U	**0.00937**	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U

Table 1. Soil Analytical Results - Detections Only

Project No. AS220138B, 35P Affordable Housing Development, Tacoma, Washington

Location	Sample	Date	Depth	Polycyclic Aromatic Hydrocarbons (PAHs)																		Other Volatile Organic Compounds (VOCs)			
				1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Anthracene	Benzo(g,h,i)perylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Total cPAHs TEQ (ND = 1/2 RDL)	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m,p-Xylenes	o-Xylene
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
MTCA A Cleanup Level											**5**				**0.1**						**0.1**				
	AMW-04-1.5	01/17/2025	1.5 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
AMW-04	AMW-04-7	01/17/2025	7 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AMW-04-37	01/20/2025	37 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AMW-04-49	01/20/2025	49 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AMW-04-56.5	01/21/2025	56.5 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AMW-04-70	01/21/2025	70 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	**0.005**	< 0.0025 U	< 0.005 U	**0.0048**	**0.0053**	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AMW-103-89	01/21/2025	89 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AMW-04-89	01/21/2025	89 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AMW-04-92	01/21/2025	92 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
TP-1	Pit 1: 0-5 in	2018	0-5 in	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-3	Pit 3: 9-11 in	2018	9-11 in	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-4	Pit 4: 0-2 in	2018	0-2 in	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-5	Pit 5: 14-15 ft	2018	14-15 ft	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-6	Pit 6: 0-5 in	2018	0-5 in	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-7	Pit 7: 9-10 ft	2018	9-10 ft	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-9	Pit 9: 0-5 in	2018	0-5 in	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-10	Pit 10: 0-2 ft	2018	0-2 ft	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-10	Pit 10: 10-11 ft	2018	10-11 ft	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TP-11	Pit 11: 0-5 in	2018	0-5 in	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Off-Property Explorations (Harrison Street ROW)																									
AB-08	AB-08-2.5	01/06/2025	2.5 ft	< 0.012 U	< 0.012 U	< 0.012 U	< 0.012 U	< 0.025 U	< 0.012 U	< 0.012 U	< 0.01 U	< 0.012 U	< 0.012 U	< 0.025 U	< 0.012 U	< 0.012 U	< 0.012 U	< 0.012 U	< 0.025 U	< 0.025 U	< 0.012 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-08-6	01/06/2025	6 ft	< 0.025 U	< 0.025 U	< 0.025 U	< 0.025 U	< 0.25 U	**0.087**	< 0.025 U	< 0.01 U	**0.033**	**0.088**	**0.052**	< 0.12 U	< 0.12 U	< 0.12 U	**0.13**	< 0.25 U	< 0.25 U	**0.104**	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-08-12	01/06/2025	12 ft	< 0.012 U	< 0.012 U	< 0.012 U	< 0.012 U	< 0.025 U	**0.038**	< 0.012 U	< 0.01 U	**0.039**	**0.044**	< 0.025 U	**0.02**	**0.025**	< 0.012 U	**0.033**	< 0.025 U	< 0.025 U	**0.0272**	< 0.05 U	< 0.05 U	**0.0082**	**0.0032**
	AB-08-17	01/06/2025	17 ft	< 0.025 U	< 0.025 U	< 0.025 U	< 0.025 U	< 0.05 U	< 0.025 U	< 0.025 U	< 0.01 U	< 0.025 U	< 0.025 U	< 0.05 U	< 0.025 U	< 0.025 U	< 0.025 U	**0.033**	< 0.05 U	< 0.05 U	**0.0228**	**0.13**	**0.064**	**0.27**	**0.17**
	AB-08-25	01/06/2025	25 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-08-32.5	01/07/2025	32.5 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	**0.0099**	**0.0041**	< 0.005 U	**0.021**	**0.0065**	< 0.005 U	< 0.0025 U	**0.0031**	< 0.0025 U	**0.0036**	< 0.005 U	< 0.005 U	**0.00247**	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-08-47.5	01/07/2025	47.5 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-101-54	01/07/2025	54 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	**0.011**	< 0.0025 U	< 0.005 U	**0.014**	**0.007**	< 0.005 U	< 0.0025 U	**0.0028**	< 0.0025 U	**0.0027**	< 0.005 U	< 0.005 U	**0.00243**	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-08-54	01/07/2025	54 ft	< 0.0025 U	< 0.0025 U	**0.003**	**0.0047**	< 0.005 U	**0.039**	**0.0058**	< 0.005 U	**0.046**	**0.026**	**0.0086**	**0.0068**	**0.0095**	**0.0032**	**0.0095**	< 0.005 U	< 0.005 U	**0.00953**	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-08-67	01/07/2025	67 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.025 U	< 0.05 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.025 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-08-77	01/08/2025	77 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-08-83	01/08/2025	83 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	**0.0052**	< 0.0025 U	< 0.005 U	**0.0079**	**0.0029**	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U
	AB-08-85	01/08/2025	85 ft	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	**0.006**	< 0.0025 U	< 0.005 U	**0.014**	**0.0031**	< 0.005 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.0025 U	< 0.005 U	< 0.005 U	< 0.0025 U	< 0.05 U	< 0.05 U	< 0.004 U	< 0.002 U

Bold - detected

Blue Shaded - Detected result exceeds Model Toxics Control Act (MTCA) Method A cleanup level for unrestricted use.

U - Analyte not detected at or above Reporting Limit (RL) shown

J - Result value estimated
UJ - Analyte not detected and the Reporting Limit (RL) is an estimate
X - Chromatographic pattern does not match fuel standard used
TEQ - Toxic Equivalence Quotient (Calculated sum of)
cPAHs - carcinogenic polycyclic aromatic hydrocarbons
mg/kg - milligrams per kilogram

Table 2. Groundwater Analytical Results

Project No. AS220138B, 35P Affordable Housing Development, Tacoma, Washington

Location			AMW-04
Date			03/20/2025
Sample		MTCA Method A	AMW-04-032025
Screen Interval (ft bgs)		Cleanup Level for	75 - 95
Depth to Water (ft bTOC)		Groundwater	85.25
Field Parameters			
Temperature	deg C		12.00
Specific Conductivity	uS/cm		295.05
Dissolved Oxygen	mg/L		2.94
pH			5.95
Oxidation Reduction Potential (ORP)	mV		166.3
Turbidity	NTU		30.9
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs)			
Benz(a)anthracene	ug/L		< 0.02 U
Benzo(a)pyrene	ug/L	0.1	< 0.02 U
Benzo(b)fluoranthene	ug/L		< 0.02 U
Benzo(k)fluoranthene	ug/L		< 0.02 U
Chrysene	ug/L		< 0.02 U
Dibenzo(a,h)anthracene	ug/L		< 0.02 U
Indeno(1,2,3-cd)pyrene	ug/L		< 0.02 U
Total cPAHs TEQ (ND = 1/2 RDL)	ug/L	0.1	< 0.02 U
Petroleum Hydrocarbons			
Gasoline Range Organics	ug/L	1000	< 100 U
Diesel Range Organics	ug/L	500	< 50 U
Motor Oil Range Organics	ug/L	500	< 250 U
Diesel and Oil Extended Range Organics	ug/L	500	< 250 U
Volatile Organic Compounds (VOCs)			
1,1,1,2-Tetrachloroethane	ug/L		< 1 U
1,1,1-Trichloroethane	ug/L	200	< 1 U
1,1,2,2-Tetrachloroethane	ug/L		< 0.2 U
1,1,2-Trichloroethane	ug/L		< 0.5 U
1,1-Dichloroethane	ug/L		< 1 U
1,1-Dichloroethene	ug/L		< 1 U
1,1-Dichloropropene	ug/L		< 1 U
1,2,3-Trichlorobenzene	ug/L		< 1 U
1,2,3-Trichloropropane	ug/L		< 1 U
1,2,4-Trichlorobenzene	ug/L		< 1 U
1,2,4-Trimethylbenzene	ug/L		< 1 U
1,2-Dibromo-3-chloropropane	ug/L		< 10 U
1,2-Dibromoethane (EDB)	ug/L	0.01	< 0.01 U
1,2-Dichlorobenzene	ug/L		< 1 U
1,2-Dichloroethane (EDC)	ug/L	5	< 0.2 U
1,2-Dichloropropane	ug/L		< 1 U
1,3,5-Trimethylbenzene	ug/L		< 1 U
1,3-Dichlorobenzene	ug/L		< 1 U
1,3-Dichloropropane	ug/L		< 1 U
1,4-Dichlorobenzene	ug/L		< 1 U
2,2-Dichloropropane	ug/L		< 1 U
2-Butanone	ug/L		< 20 U
2-Chlorotoluene	ug/L		< 1 U
2-Hexanone	ug/L		< 10 U
4-Chlorotoluene	ug/L		< 1 U
4-Methyl-2-pentanone	ug/L		< 10 U
Acetone	ug/L		< 50 U
Benzene	ug/L	5	< 0.35 U
Bromobenzene	ug/L		< 1 U
Bromodichloromethane	ug/L		< 0.5 U
Bromoform	ug/L		< 5 U
Bromomethane	ug/L		< 5 U
Carbon Tetrachloride	ug/L		< 0.5 U
Chlorobenzene	ug/L		< 1 U
Chloroethane	ug/L		< 1 U
Chloroform	ug/L		< 1 U
Chloromethane	ug/L		< 10 U
cis-1,2-Dichloroethene (cDCE)	ug/L		< 1 U
cis-1,3-Dichloropropene	ug/L		< 0.4 U
Dibromochloromethane	ug/L		< 0.5 U
Dibromomethane	ug/L		< 1 U
Dichlorodifluoromethane	ug/L		< 1 U

Table 2. Groundwater Analytical Results

Project No. AS220138B, 35P Affordable Housing Development, Tacoma, Washington

Location Date Sample Screen Interval (ft bgs) Depth to Water (ft bTOC)		MTCA Method A Cleanup Level for Groundwater	AMW-04 03/20/2025 AMW-04-032025 75 - 95 85.25
Ethylbenzene	ug/L	700	< 1 U
Hexachlorobutadiene	ug/L		< 0.5 U
Isopropylbenzene	ug/L		< 1 U
m,p-Xylenes	ug/L		< 2 U
Methyl tert-butyl ether (MTBE)	ug/L	20	< 1 U
Methylene Chloride	ug/L	5	< 5 U
n-Hexane	ug/L		< 5 U
n-Propylbenzene	ug/L		< 1 U
Naphthalene	ug/L	160	< 1 U
o-Xylene	ug/L		< 1 U
p-Isopropyltoluene	ug/L		< 1 U
sec-Butylbenzene	ug/L		< 1 U
Styrene	ug/L		< 1 U
tert-Butylbenzene	ug/L		< 1 U
Tetrachloroethene (PCE)	ug/L	5	< 0.5 U
Toluene	ug/L	1000	< 1 U
Total Xylenes	ug/L	1000	< 2 U
trans-1,2-Dichloroethene	ug/L		< 1 U
trans-1,3-Dichloropropene	ug/L		< 0.4 U
Trichloroethene (TCE)	ug/L	5	< 0.05 U
Trichlorofluoromethane	ug/L		< 1 U
Vinyl Chloride	ug/L	0.2	< 0.02 U

Notes

U - Analyte not detected at or above reporting limit shown
TEQ - Toxic Equivalence Quotient (Calculated sum of)
ND = 1/2 RDL - calculated using 1/2 the reporting limit for non-detected components
ug/L - micrograms per liter
deg C - degrees celsius
uS/cm - microSiemens per centimeter
mV - millivolts
mg/L - milligrams per liter
NTU - Nephelometric Turbidity Unit

Table 3. Methane Monitoring Results

Project No. AS220138B, 35P Affordable Housing Development, Tacoma, Washington

Location	Screen Interval (ft bgs)	Date	Time	Barometric Pressure [1] (inches Hg)	Methane (% by volume)
AGP-01	4 - 4.5	3/20/2025	--		--
		4/7/2025	11:30	29.84 ↓	0.3
		6/12/2025	15:30	29.74 ↓	0.0
AGP-02	4 - 4.5	3/20/2025	--		--
		4/7/2025	11:10	29.84 ↓	8.8
		6/12/2025	15:00	29.74 ↓	5.7
AGP-03	4 - 4.5	3/20/2025	15:45	29.99 ↓	3.6
		4/7/2025	11:20	29.84 ↓	5.0
		6/12/2025	15:45	29.74 ↓	4.6

Notes

1 Barometric pressure data from weather station located at Seattle-Tacoma International Airport

ft bgs - feet below ground surface

Hg - mercury

↓ - indicates falling barometric pressure at time of reading

-- - not measured due to precipitation in the vapor probe tubing

Table 4. Remedial Alternatives MTCA Criteria Evaluation

Project No. AS220138B, 35P Affordable Housing Development, Tacoma, Washington

			Alternative 2 Contaminated Fill Removal to 15 feet and Off-Property Disposal	Alternative 3 Containment (Capping) of Contaminated Fill with Institutional Controls
GENERAL MTCA CRITERIA WAC 173-340-360(3)(a)				
1	Protection of Human Health and the Environment		Yes - Human health and the environment are protected because contaminated fill soil is removed from the Property to 15 feet bgs, the standard point of compliance for soil for direct contact	Yes - Human health and the environment are protected via containment (capping) and institutional controls (environmental covenant) (see Section 6.3)
2	Compliance with Cleanup Standards		Yes - Following removal of contaminated fill soil to 15 feet bgs, the cleanup levels would be met at the point of compliance	Yes - Following cap construction, contaminated fill soil would be contained at depths of 10 feet bgs and would comply with the cleanup standards in WAC 173-340-740(6)(f)(i) through (vi).
3	Compliance with Applicable State and Federal Laws		Yes - Compliance with applicable laws would be ensured through obtaining required permits for conducting the cleanup construction (see Section 6.2)	Yes - Compliance with applicable laws will be ensured through obtaining required permits for conducting the cleanup construction (see Section 6.2)
4	Prevent or Minimize Present and Future Releases and Migration of Hazardous		Yes - Contaminant exposure and migration controlled by removal of contaminated fill soil	Yes - Contaminant exposure and migration controlled by containment (capping) of contaminated fill soil
5	Provide Resilience to Climate Change		Yes - Climate change is not anticipated to impact performance of Alternative 2	Yes - Climate change is not anticipated to impact performance of Alternative 3
6	Provision for Compliance Monitoring		Yes - Provisions for compliance monitoring would include confirmation soil sampling at the excavation extents	Yes - Provisions for compliance monitoring include cap inspections during construction and implementation of a inspection, monitoring, and maintenance plan to manage long-term cap integrity.
7	Not Rely Primarily on Institutional Controls and Monitoring		Yes - Alternative 2 includes excavation and off-Property disposal of contaminated fill soil in the upper 15 feet bgs	Yes - Alternative 3 includes construction of cap features to limit risk for direct contact to contaminated fill soil (hardscape and softscapes with geotextile) (see Section 6.4.1)
8	Not Rely Primarily on Dilution or Dispersion		Yes - Alternative 2 includes excavation and off-Property disposal of contaminated fill soil in the upper 15 feet bgs	Yes - Alternative 3 relies on containment (capping), institutional controls (environmental covenant), and monitoring
9	Provides a Reasonable Restoration Time Frame		Yes - Cleanup would be accomplished when excavation of contaminated fill soil in the upper 15 feet bgs is completed	Yes - Cleanup will be accomplished when hardscapes and softscapes are constructed within 12 months of excavation start.
10	Permanent to the Maximum Extent Practicable[1]		Yes - see rationale below	Yes - see rationale below
		Protectiveness	Exposure risk would be lowest with this alternative, because contaminated fill soil would be removed and cleanup levels would be met at the point of compliance 9	Exposure risk would be low, but slightly higher than Alternative 2 because this alternative relies on containment of contaminated fill soil in-place managed by institutional controls 8
		Permanence	Highly permanent due to the removal of contaminated fill soil in the upper 15 feet from the Subject Property 9	Slightly less permanent than Alternative 2, because it relies on maintenance of the containment (cap) features. But, this alternative is still considered highly permanent because cap monitoring would be required by the environmental covenant, which would be recorded with the Property deed*in perpetuity* 8
		Long-Term Effectiveness	Highly effective over the long-term due to removal of contaminated fill soil from the Subject Property 10	Slightly less effective than Alternative 2, because the cap components (hardscapes and softscapes) will require maintenance/repair over time. But, still considered highly effective over the long-term due to the institutional controls that require monitoring, maintenance, and repair being in-place*in perpetuity* 9
		Management of Implementation Risks	Moderate short-term risk to human health, particularly to construction workers, during excavation of contaminated fill soil 7	Very low short-term risk to human health (including construction workers) because contaminated fill soil will not be exposed during implementation 9
		Implementability	Moderate to low implementability, because excavation would require engineering of temporary shoring system, careful engineering and design related to excavating in close-proximity to the City's major water main utility line within the City Easement Area. And, because the City Easement Area that does not currently allow for ground disturbance, Alternative 2 would require lengthy and complicated negotiation with the City to change the easement terms. 6	Highly implementable, because construction of the cap features would be incorporated into design of and occur concurrently with the planned redevelopment construction 9
	MTCA Benefits Ranking[2]		41	43
	Estimated Incremental Cost[3]		$7,470,000	$50,000

Notes:

[1] A numeric scale of 1 to 10 is used to rate each alternative with regards to the five criteria for evaluating the use of permanent solutions to the maximum extent practicable, where 1 is low and 10 is high

[2] The MTCA Benefits Ranking for each alternative is the unweighted sum of the rating for each of the five criteria for evaluating the use of permanent solutions to the maximum extent practicable

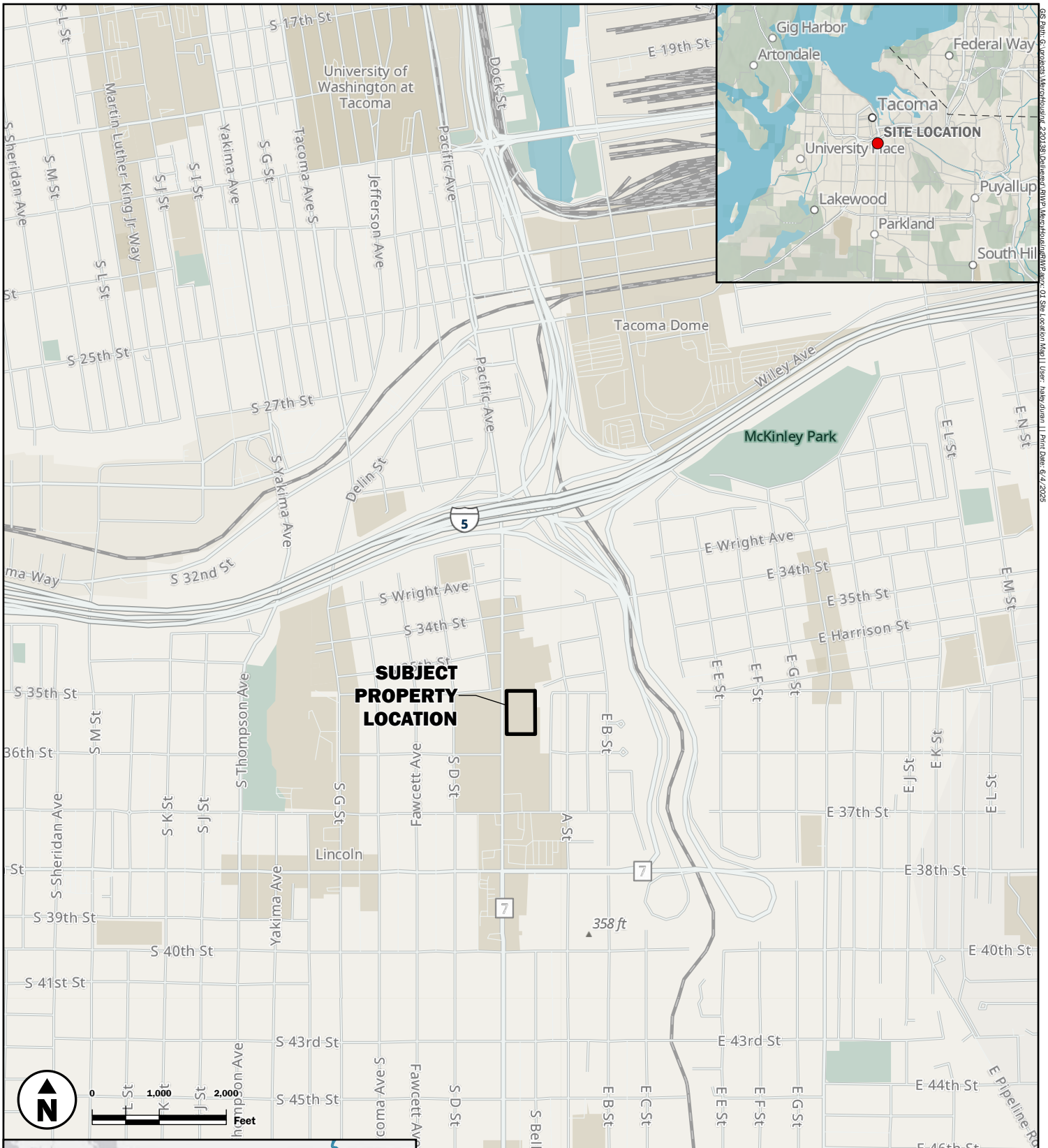
[3] The incremental costs for each of Alternatives 2 and 3 were developed as follows:

- The incremental cost for implementing Alternative 2 is based the excavation and soil disposal related components of this alternative, which are the primary differences between Alternative 2 and Alternative 3. The excavation components of Alternative 2 would include: excavation of 35,889 tons of soil requiring disposal at a Subtitle D Landfill, resulting in a soil excavation, loading, transport, and disposal cost of approximately $4.13M; temporary shoring at the perimeter of the excavation at a cost of approximately $1.73M; and, import, placement, and compaction of clean fill soil to restore ground surface at an estimated cost of approximately $1.61M.

- Alternative 3 does not include excavation and off-Property disposal, so the incremental cost of implementing Alternative 3 is the institutional controls (environmental covenant) and IM&M components of this alternative, since the cap construction would occur as part of the planned redevelopment. The incremental cost of implementing Alternative 3 is $50,000 for 20 years of monitoring.

Refer to Section 6.5 of the RIFS-CAP report for additional detail and cost assumptions.

FIGURES



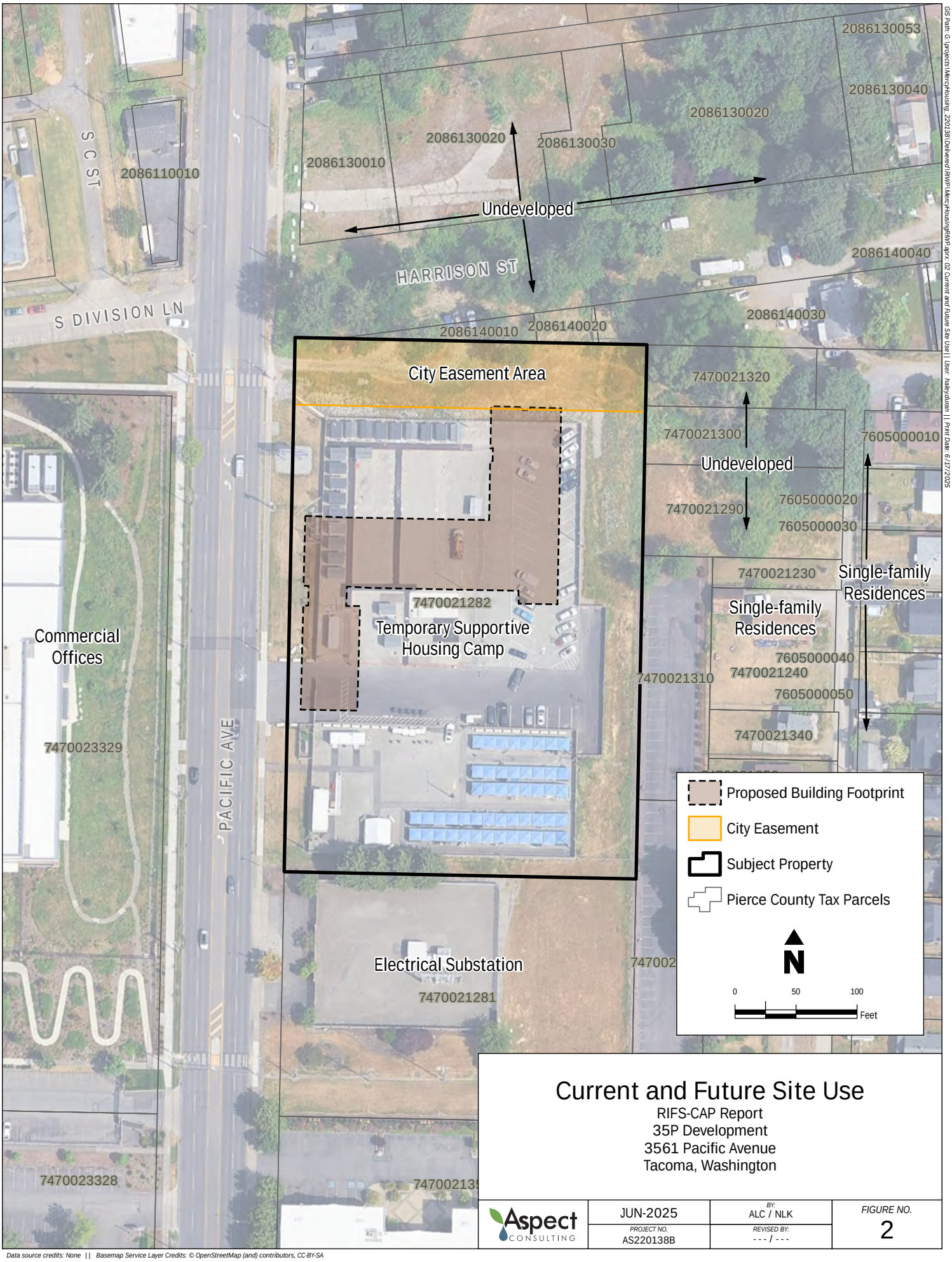
Site Location Map

RIFS-CAP Report
35P Development
3561 Pacific Avenue
Tacoma, Washington

Aspect CONSULTING	MAY-2025	BY: HRC / HMD	FIGURE NO. 1
	PROJECT NO. AS220318B	REVISED BY: ---/---	

Data source credits: None || Basemap Service Layer Credits: Esri, CGIAR, USGS, City of Tacoma, King County, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USFWS, Esri, HERE, Garmin, USGS, EPA, NPS

GIS Path: G:\projects\Marco\Housing\220318\Delivered\RIWP\Marco Housing\RIWP.aprx: 01 Site Location Map | User: haley.duran | Print Date: 6/4/2025



Current and Future Site Use

RIFS-CAP Report
35P Development
3561 Pacific Avenue
Tacoma, Washington

Aspect CONSULTING	JUN-2025	BY: ALC / NLK	FIGURE NO. 2
	PROJECT NO. AS220138B	REVISED BY: - - - / - - -	

Data source credits: None | | Basemap Service Layer Credits: © OpenStreetMap (and) contributors, CC-BY-SA

GIS Path: G:\projects\MercyHousing_220138\Delivered\RIWP\MercyHousingRIWP.aprx; 02 Current and Future Site Use | User: haleyduran | | Print Date: 6/17/2025

1957 Aerial Photograph



1968 Aerial Photograph



1990 Aerial Photograph



2017 Aerial Photograph



Subject Property

N

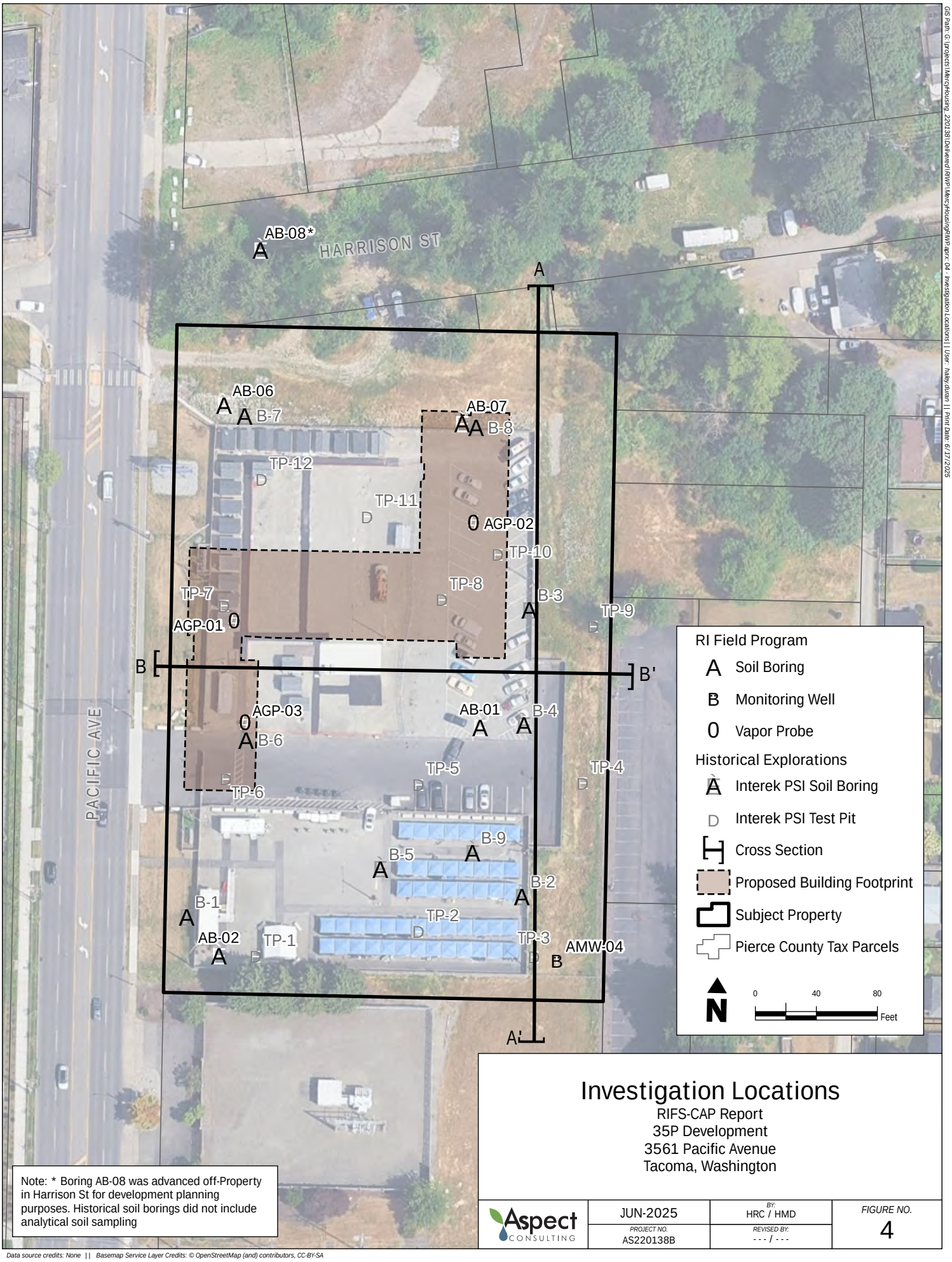
Notes:

Historical aerial photographs provided by Environmental Data Resources, Inc.

Historical Features

RIFS-CAP
35P Development
3561 Pacific Avenue
Tacoma, Washington

Aspect Consulting	APR - 2024	BY: ALC	FIGURE NO. 3
	PROJECT NO. 220138	REVISED BY: ---/---	



Investigation Locations

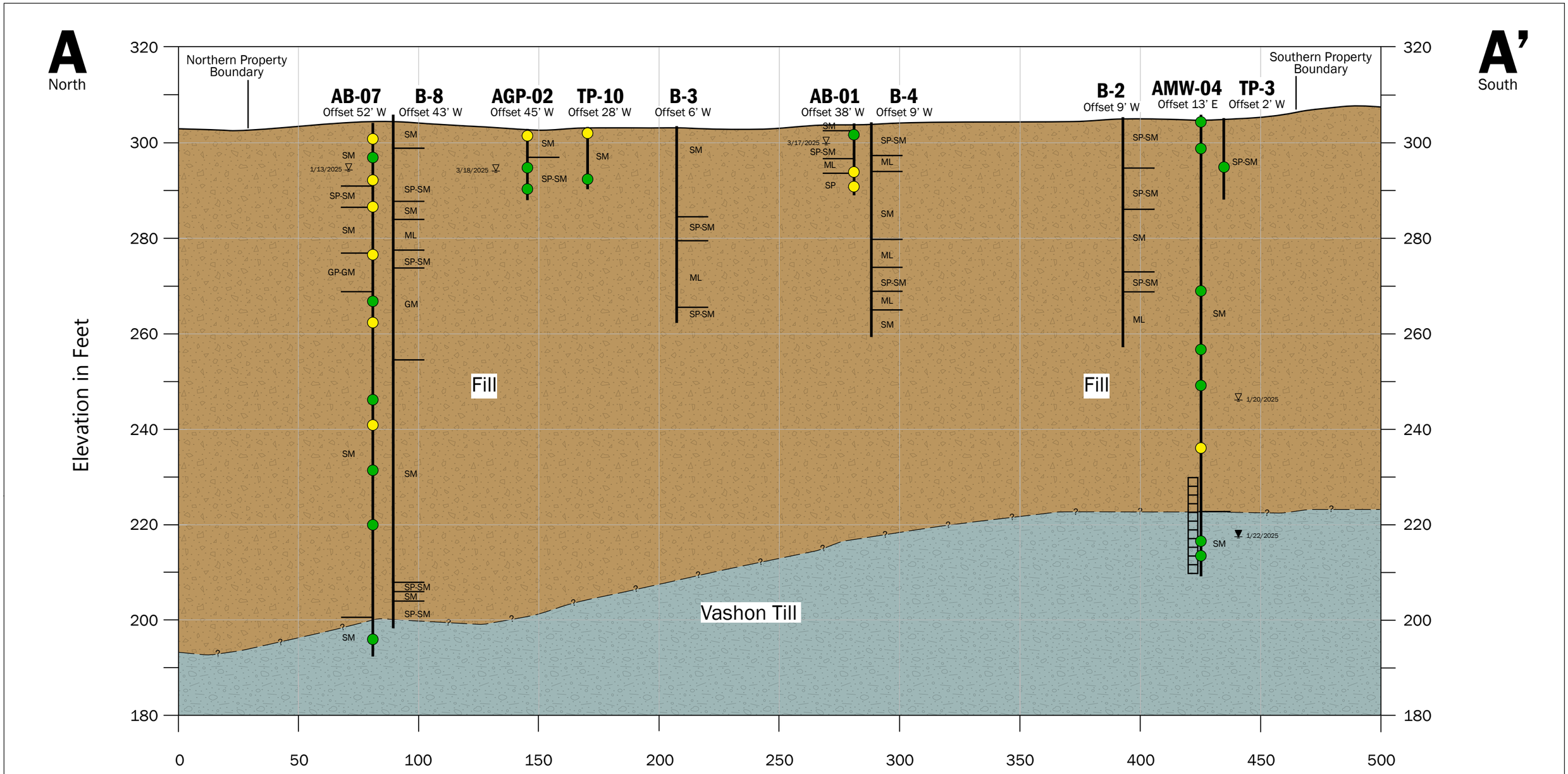
RIFS-CAP Report
35P Development
3561 Pacific Avenue
Tacoma, Washington

Note: * Boring AB-08 was advanced off-Property in Harrison St for development planning purposes. Historical soil borings did not include analytical soil sampling

Aspect Consulting	JUN-2025	BY: HRC / HMD	FIGURE NO. 4
	PROJECT NO. AS220138B	REVISED BY: --- / ---	

Data source credits: None | | Basemap Service Layer Credits: © OpenStreetMap (and) contributors, CC-BY-SA

GIS Path: G:\projects\MercyHousing_220138\Delivered\RI\WP\MercyHousingRIWP.aprx; 04 - Investigation Locations | User: haley.duran | Print Date: 6/17/2025



Profile Legend

Lithology Graphics

- Fill
- Vashon Till

Soil Analytical Results for TPH, PAHs, and VOCs

- Analytes not detected
- Analytes detected at concentrations less than the MTCA Method A cleanup Level
- Analytes detected at concentrations greaer than the MTCA Method A Cleanup Level

Explorations

- B-01 (Offset 3.1' SE) — Exploration Name and Offset
- Soil Sample
- SM — USCS Soil Description*
- Geologic Contact, Dashed Where Inferred
- Water Level at Time of Drilling
- Well Screen Interval
- Static Water Level

0 40 80
Feet

Horizontal Scale 1" = 40'
Vertical Scale 1" = 20'
Vertical Exaggeration 2x

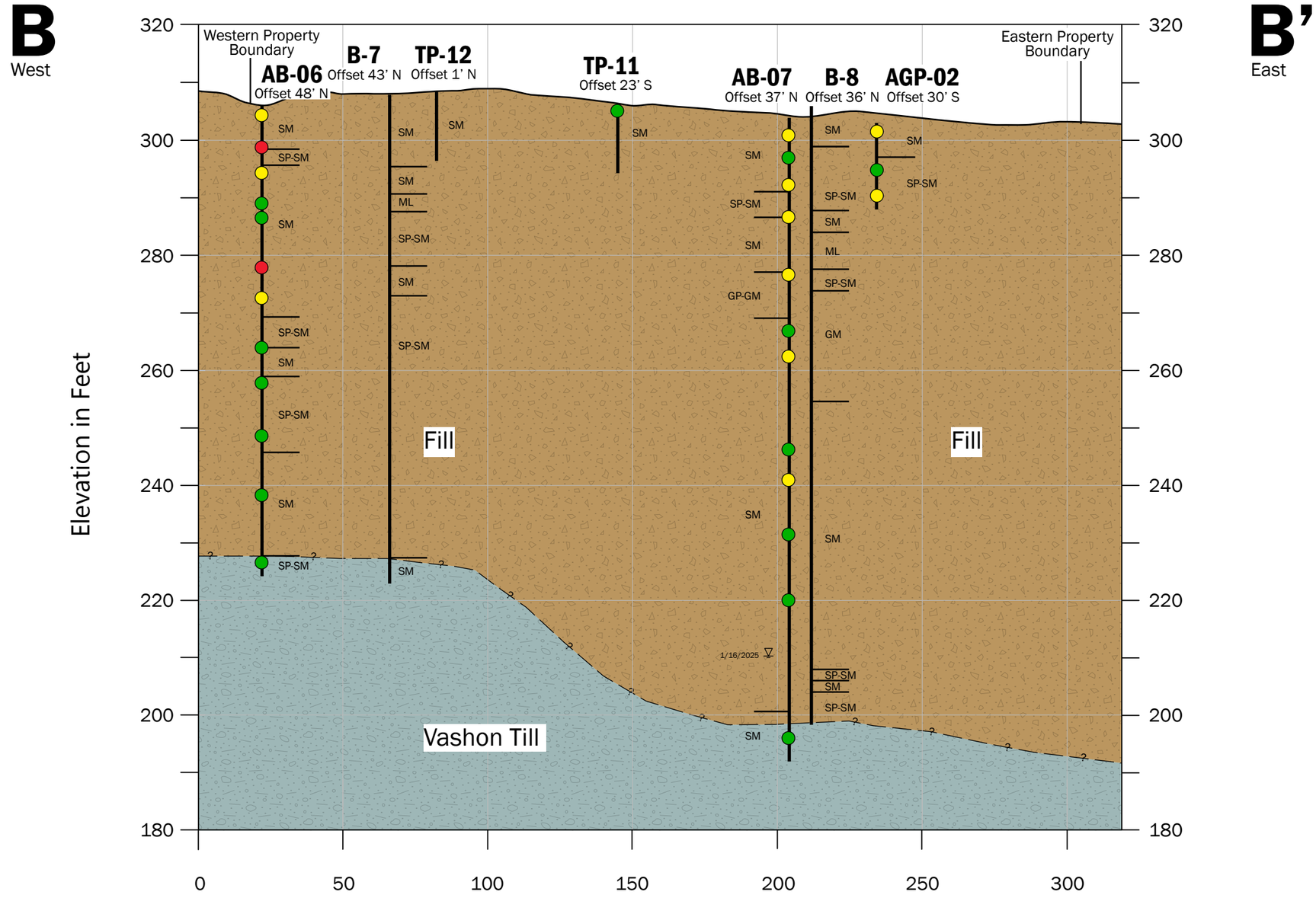
NOTES:
*Unified Soil Classification System (USCS) soil descriptions. Refer to the boring logs in Appendix B for definitions and further information.
- TPH = petroleum hydrocarbons
- PAHs = polycyclic aromatic hydrocarbons
- VOCs = volatile organic comopunds
- MTCA = Model Toxics Control Act

DISCLAIMER: The subsurface conditions presented in this geologic cross section are conceptual. Variations may exist between the soil and groundwater conditions depicted on this figure and those actually underlying the site. Refer to the contents of this report and boring logs for further context. Site features are approximate.

Cross Section A-A'

RIFS-CAP
35P Development
3561 Pacific Avenue
Tacoma, Washington

Aspect Consulting	MAY-2025	BY: JBM/CMT	FIGURE NO. 5
	PROJECT NO. AS220138B-A5-01	REVISED BY: ALC	



Profile Legend

Lithology Graphics

- Fill
- Vashon Till

Soil Analytical Results for TPH, PAHs, and VOCs

- Analytes not detected
- Analytes detected at concentrations less than the MTCA Method A cleanup Level
- Analytes detected at concentrations greaer than the MTCA Method A Cleanup Level

Explorations

- B-01 — Exploration Name and Offset
- Soil Sample
- SM — USCS Soil Description*
- Geologic Contact, Dashed Where Inferred
- Water Level at Time of Drilling
- Well Screen Interval
- Static Water Level

0 40 80 Feet

Horizontal Scale 1" = 40'
Vertical Scale 1" = 20'
Vertical Exaggeration 2x

NOTES:
*Unified Soil Classification System (USCS) soil descriptions. Refer to the boring logs in Appendix B for definitions and further information.
- TPH = petroleum hydrocarbons
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- VOCs = volatile organic comopunds
- MTCA = Model Toxics Control Act

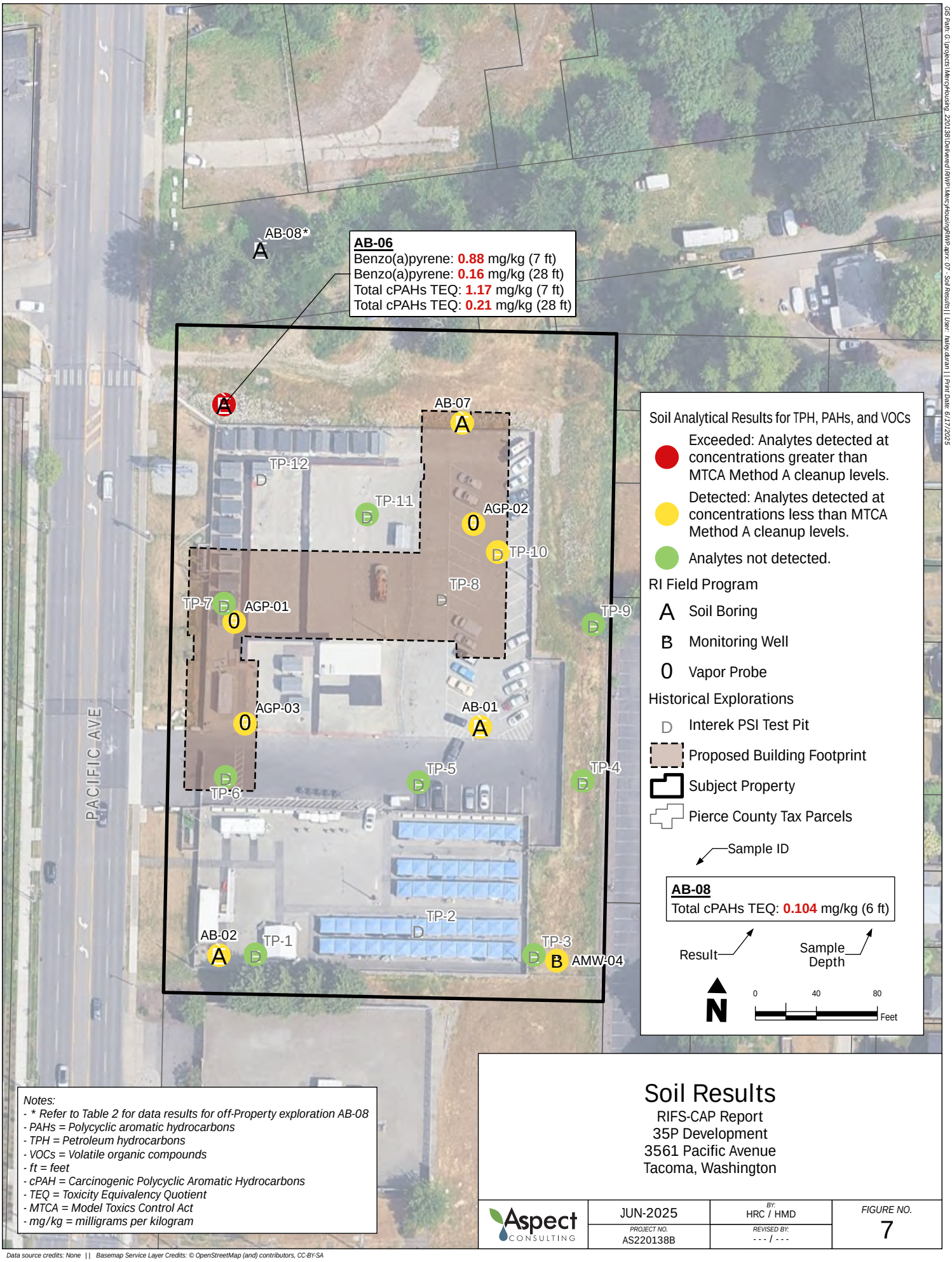
DISCLAIMER: The subsurface conditions presented in this geologic cross section are conceptual. Variations may exist between the soil and groundwater conditions depicted on this figure and those actually underlying the site. Refer to the contents of this report and boring logs for further context. Site features are approximate.

Cross Section B-B'

RIFS-CAP
35P Development
3561 Pacific Avenue
Tacoma, Washington

Aspect Consulting

MAY-2025	BY: JBM/CMT	FIGURE NO. 6
PROJECT NO. AS220138B-A5-01	REVISED BY: ALC	



Notes:
- ** Refer to Table 2 for data results for off-Property exploration AB-08*
- *PAHs = Polycyclic aromatic hydrocarbons*
- *TPH = Petroleum hydrocarbons*
- *VOCs = Volatile organic compounds*
- *ft = feet*
- *cPAH = Carcinogenic Polycyclic Aromatic Hydrocarbons*
- *TEQ = Toxicity Equivalency Quotient*
- *MTCA = Model Toxics Control Act*
- *mg/kg = milligrams per kilogram*

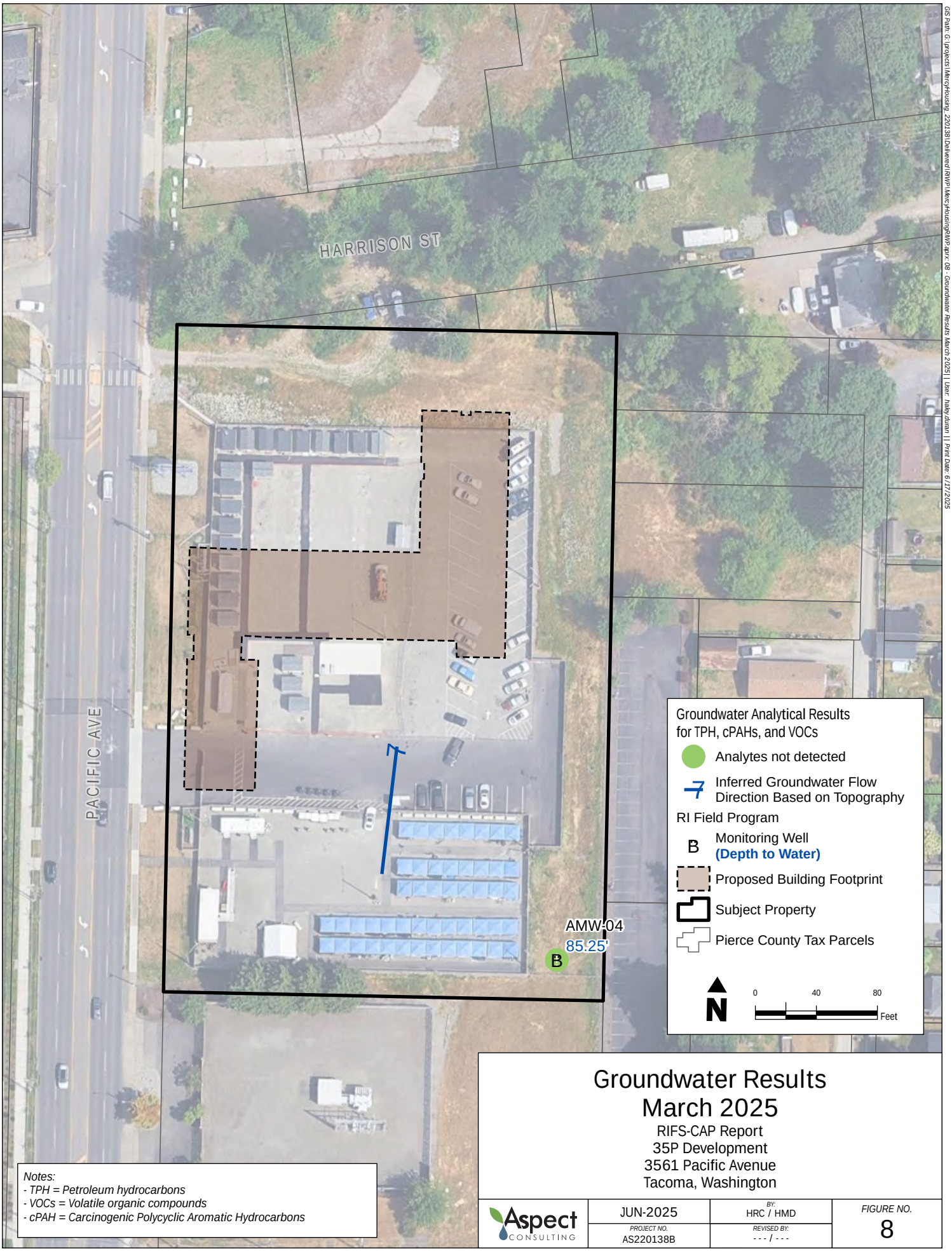
Soil Results

RIFS-CAP Report
35P Development
3561 Pacific Avenue
Tacoma, Washington

Aspect Consulting	JUN-2025	BY: HRC / HMD	FIGURE NO. 7
	PROJECT NO. AS220138B	REVISED BY: - - - / - - -	

Data source credits: None | | Basemap Service Layer Credits: © OpenStreetMap (and) contributors, CC-BY-SA

GIS Path: G:\projects\MercyHousing_220138\Delivered\RI\WP\Merc yHousing\RI\WP.aprx; 07 - Soil Results\ | User: talley.duran | Print Date: 6/17/2025



Groundwater Results
March 2025

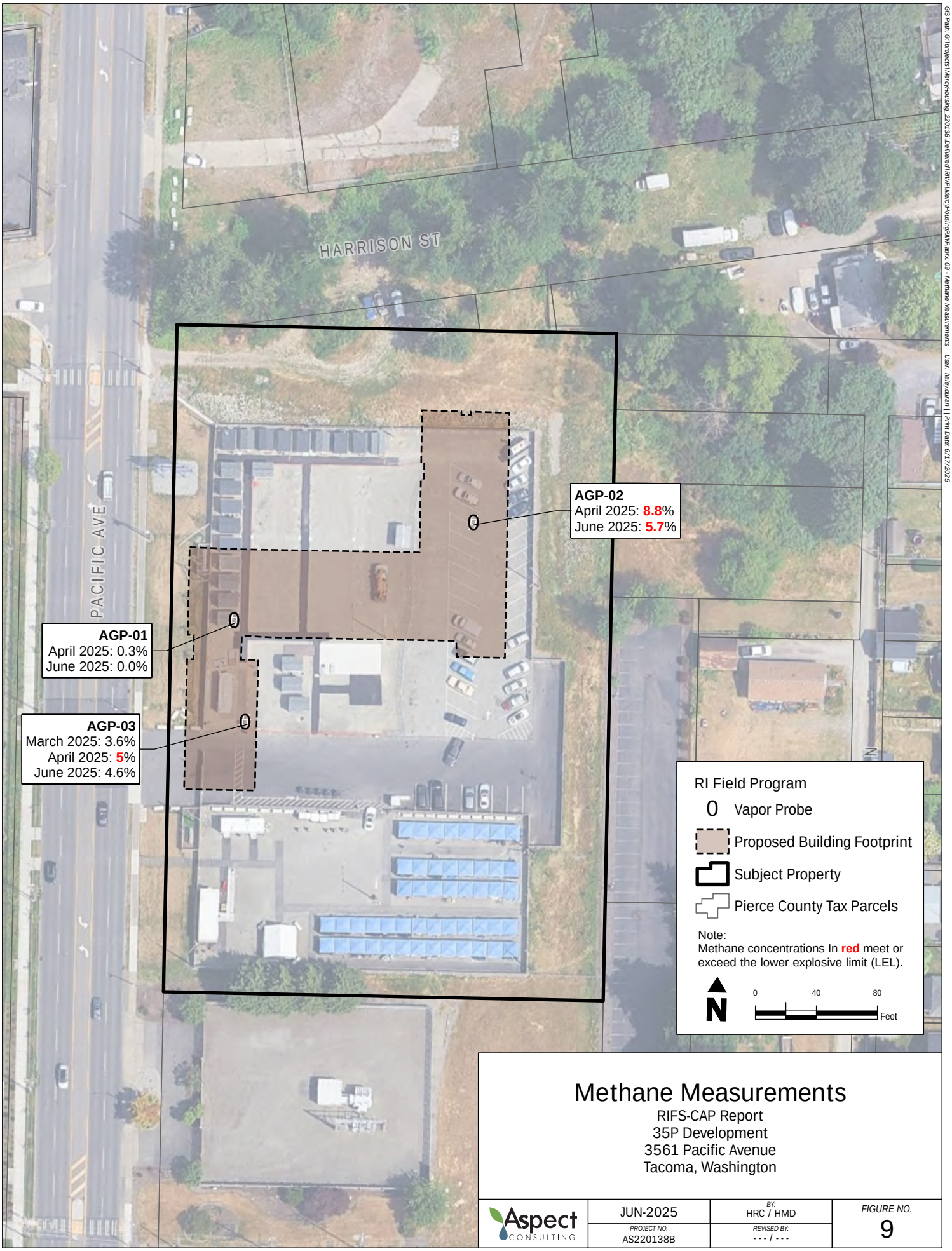
RIFS-CAP Report
35P Development
3561 Pacific Avenue
Tacoma, Washington

Notes:
- TPH = Petroleum hydrocarbons
- VOCs = Volatile organic compounds
- cPAH = Carcinogenic Polycyclic Aromatic Hydrocarbons

Aspect CONSULTING	JUN-2025	BY: HRC / HMD	FIGURE NO. 8
	PROJECT NO. AS220138B	REVISED BY: - - - / - - -	

Data source credits: None | | Basemap Service Layer Credits: © OpenStreetMap (and) contributors, CC-BY-SA

GIS Path: G:\projects\MetroHousing_220138\Delivered\RI\WP\Merc\HousingRI\WP.aprx; 08 - Groundwater Results March 2025\| User: haley.duran \| Print Date: 6/17/2025



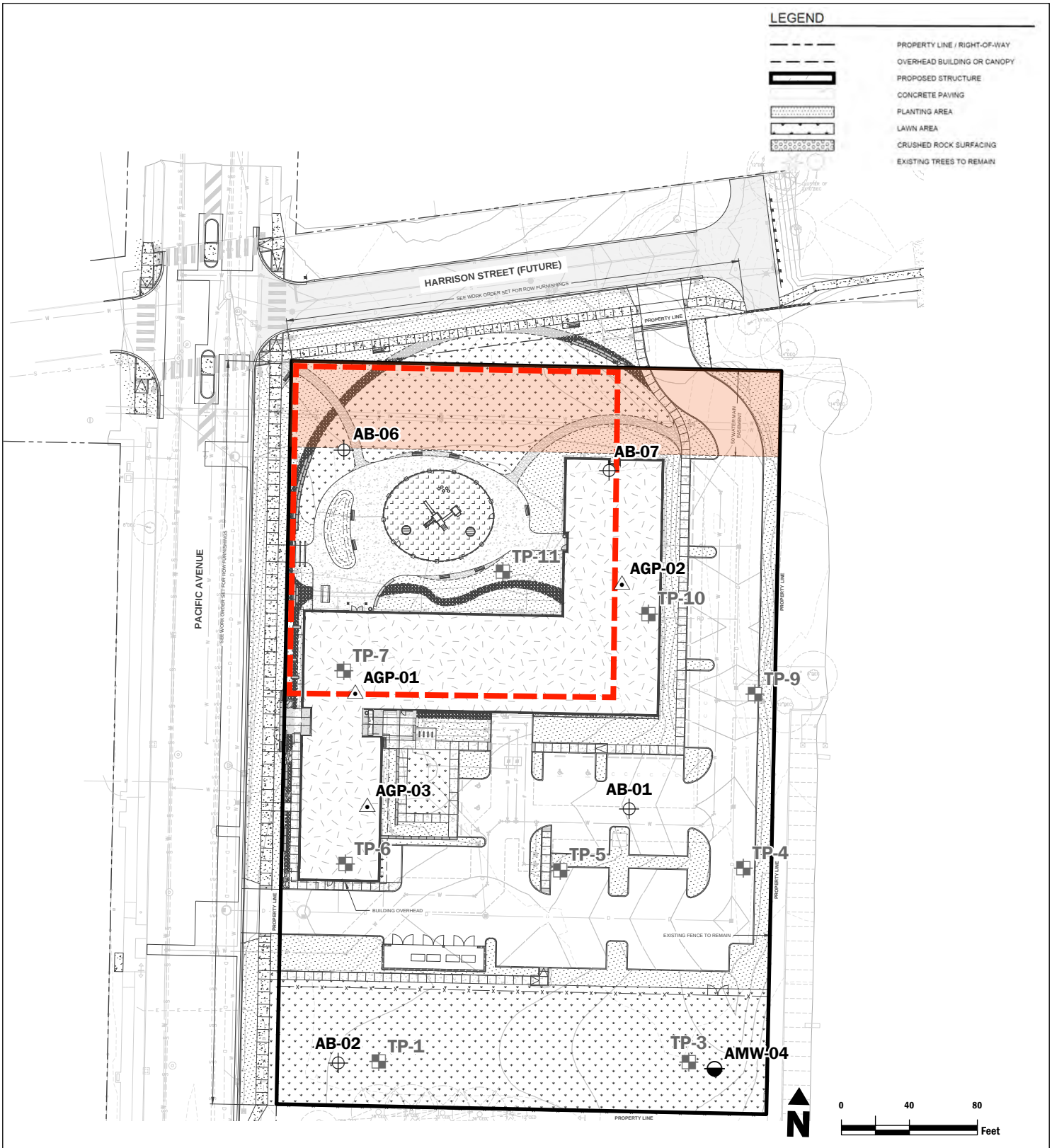
Methane Measurements

RIFS-CAP Report
35P Development
3561 Pacific Avenue
Tacoma, Washington

Aspect CONSULTING	JUN-2025	BY: HRC / HMD	FIGURE NO. 9
	PROJECT NO. AS220138B	REVISED BY: --- / ---	

GIS Path: G:\projects\MercyHousing_220138\Delivered\RI\WP\MercyHousingRIWP.aprx; 09 - Methane Measurements || User: haley.duran || Print Date: 6/17/2025

Data source credits: None || Basemap Service Layer Credits: © OpenStreetMap (and) contributors, CC-BY-SA



RI Field Program

- Soil Boring
- Monitoring Well
- Vapor Probe

Historical Explorations

- Interek PSI Test Pit

- Contaminated Fill Area
- City Easement Area
- Subject Property
- Pierce County Tax Parcels

Notes:
- Proposed redevelopment features shown are preliminary

Contaminated Fill Area and Proposed Development Plan

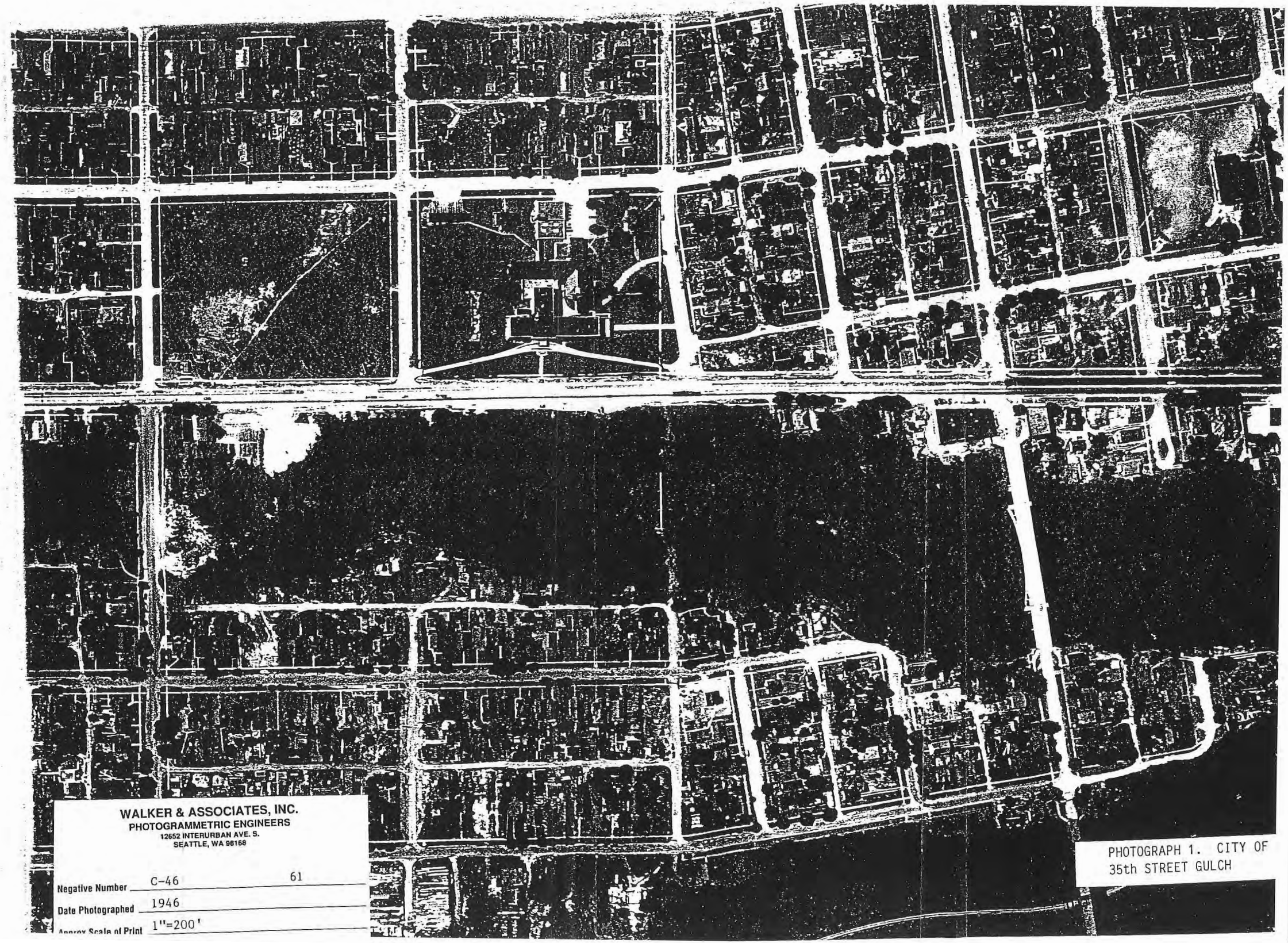
RIFS-CAP Report
35P Development
3561 Pacific Avenue
Tacoma, Washington

Aspect Consulting	JUN-2025	BY: HMD / ALC	FIGURE NO. 10
	PROJECT NO. AS220138B	REVISED BY: ---/---	

Data source credits: Basemap from Mercy Housing Northwest - 35th and Pacific Family Housing SDEV PERMIT SUB planset dated June 13, 2025

APPENDIX A

Historical Environmental Records



WALKER & ASSOCIATES, INC.
PHOTOGRAMMETRIC ENGINEERS
12652 INTERURBAN AVE. S.
SEATTLE, WA 98168

Negative Number C-46 61
Date Photographed 1946
Approx Scale of Print 1"=200'

PHOTOGRAPH 1. CITY OF
35th STREET GULCH



WALKER & ASSOCIATES, INC.
PHOTOGRAMMETRIC ENGINEERS
12652 INTERURBAN AVE. S.
SEATTLE, WA 98168

Negative Number PT-69 18-5

Date Photographed 3-25-69

Approx Scale of Print 1"=200'

Other Identification W/O 2903

COPYRIGHT 1990

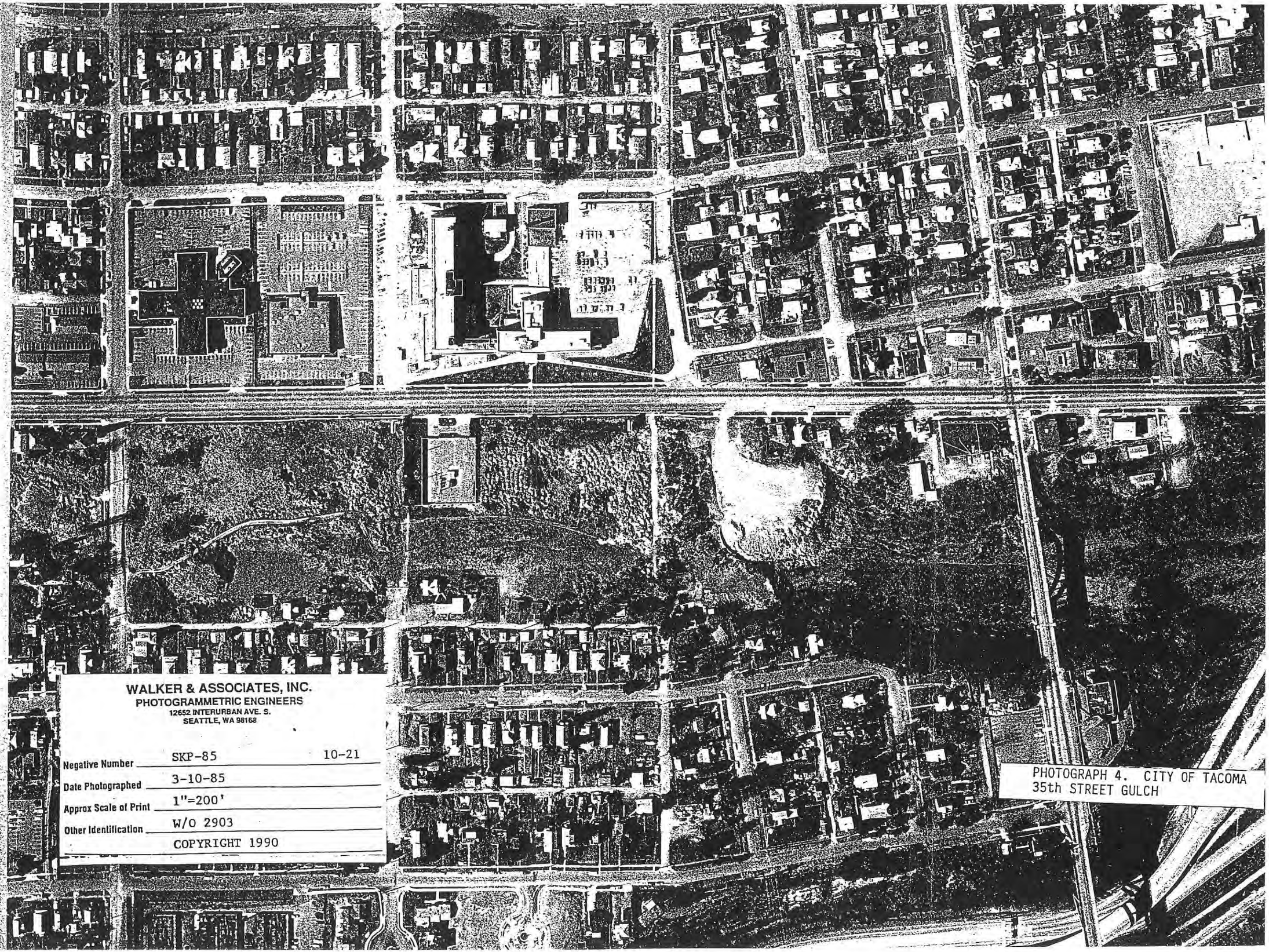
PHOTOGRAPH 2. CITY OF T
35th STREET GULCH



WALKER & ASSOCIATES, INC.
PHOTOGRAMMETRIC ENGINEERS
12552 INTERURBAN AVE. S.
SEATTLE, WA 98168

Negative Number PTM-79 22-6
Date Photographed 5-15-79
Approx Scale of Print 1"=200'
Other Identification W/O 2903

PHOTOGRAPH 3. CITY OF TACOMA
35th STREET GULCH



WALKER & ASSOCIATES, INC.
PHOTOGRAMMETRIC ENGINEERS
12652 INTERURBAN AVE. S.
SEATTLE, WA 98168

Negative Number	SKP-85 10-21
Date Photographed	3-10-85
Approx Scale of Print	1"=200'
Other Identification	W/O 2903
	COPYRIGHT 1990

PHOTOGRAPH 4. CITY OF TACOMA
35th STREET GULCH



WALKER & ASSOCIATES, INC.
PHOTOGRAMMETRIC ENGINEERS
12652 INTERURBAN AVE. S.
SEATTLE, WA 98168

Negative Number PS-89 12-40
Date Photographed 9-10-89
Approx Scale of Print 1"=300'
Other Identification W/O 2903
COPYRIGHT 1990

PHOTOGRAPH 5. CITY OF TACOMA
35th STREET GULCH

INTERVIEWS

4-9-91 – Phone conversation with Mr. Bill Dickson, owner of Dickson Lige Construction.

Bill Dickson purchased three lots on the east side of Pacific Avenue, north of Harrison Street, on April 23, 1973. The address of this property is 3515 Pacific Avenue South.

Dickson Construction dumped material in the gulch between Harrison and South 35th Streets. This was with the permission of Public Works Director R. M. Button. This dumping stopped in October 1987, when Dennis Crumbley, Chief of Street Maintenance, directed Dickson Construction to cease dumping on City property.

The material that Dickson dumped was from sewer and road construction projects. This consisted of bricks, concrete, asphalt, concrete and clay pipe, and excavated soil and base material. Dickson was very careful not to dump wood. Bill Dickson believes that about half the fill in this area is from the construction of Interstate 705 between I-5 and downtown Tacoma. Material from this project consisted of concrete footings from buildings and bridges and soil excavation.

Most of the material that Dickson dumped was from City projects. No other companies were allowed to dump while Dickson was in control.

Bill Dickson stated that the gulch property between Harrison and South 37th Street was owned by the State. This area was filled with excavated material from the construction of I-5 and the Highway 7 spur. The main contractor during this work was Northwest Construction, who is no longer in business. During construction of Highway 7, scrapers would collect soil and drive down East 38th Street and into the gulch to dump. Bill believes that the fill in this area is mostly clean dirt and concrete.

The property across Pacific Avenue from the hospital was purchased from the State by the owners of the hospital. The hospital allowed many different companies to dump. Bill believe that during this time a lot of garbage was dumped.

Once Dickson stopped dumping on the City property in 1987, the City allowed contractor's working on City projects to dump in this area. Bill could only comment on material that Tucci Construction dumped. He felt that it was mostly waste from sewer projects that contained very little wood scraps.

4-9-91 -- Phone conversation with Mrs. Cruser, 3510 East A Street, 475-6493.

The Cruser's have lived in the house for 22 years. When they moved in, the gulch started at Harrison Street. She remembers only dirt and concrete being dumped up to the time that the City started dumping. When the City started dumping, the material contained a lot of paper. There would be many seagulls flying around after the City trucks dumped. Mrs. Cruser remembers the trucks dumping off the upper edge of the fill. She said it was quite ugly to look at.

Mrs. Cruser stated that all the residents around the gulch are new people or renters.

4-9-91 -- Mike Juetten

Mike did not really know what went in the dump.

Mike was not aware of any contractors working on City jobs dumping here.

4-9-91 -- Dean Pitsch, Street Maintenance Division Manager, 272-2529

Mr. Pitsch retired 10 years ago and was not involved in any dumping at this site. He said that Dennis Crumbley shut Dickson down because he was dumping in the City right-of-way.

4-9-91 -- Phone conversation with Mike Wootan, Senior Supervisor, Street Maintenance Division.

The City started dumping in the South 35th right-of-way in 1984. Street sweepings along with sewer and water break-out material made up most of the fill.

In 1986, Tucci Construction built the road to the base of the fill. This road was constructed with material removed from the large sewer job on Pacific Avenue. This material consisted of excavated earth, sewer pipe, concrete, asphalt and base material. Street Maintenance paved this road with asphalt.

From 1987 to 1989, City departments dumped at the base of the fill. In 1989, dumping ceased at the base and material was then dumped over the upper edge of the fill.

In December 1990, the dump was closed.

In 1987, Dennis Crumbley closed down Dickson because Dickson was dumping material in the South 35th Street right-of-way.

Mike stated that there may have been a few instances when contractors working on City jobs were allowed to dump here.

4-18-91 -- Conversation with Kent Turnipseed.

Kent thought that the high reading of combustible gas was from street sweepings, leaves and catch basin cleanings.

4-22-91 -- Conversation with Bill Iyall.

Bill Iyall stated that most of the trucks collecting fall leaves did not dump at 35th and Pacific. Only trucks with leaves and a lot of street sweepings (sand paper) dumped at 35th.

Bill also stated that MC-800 asphalt produced at the City plant is cut with naptha. Some of this asphalt was dumped at 35th and Pacific.

4-30-91 -- Conversation with long time Street Maintenance employees; Ken Metcalf and Dave Molm.

Crews dumped material off the edge of the fill for the last two years. Most dumping took place on the northeast edge in an attempt to fill over the City right-of-way on the east side of the gulch at East A and 35th Street. Ken and Dave believed that this area would contain the greatest amount of leaves and street sweepings in the landfill. In the fall, street sweepers dumped three to eight loads per day consisting mostly of leaves. Dump trucks, which usually dumped leaves from fall clean-up in the parks, would sometimes dump at 35th if they were running late. These trucks can haul five and ten cubic yards.

Dave Molm stated that the material that really smelled like methane gas came from the Sewer Department's catch basins and the ditch cleaners.

Ken and Dave thought that dumping took place over the past five years. The depth of material dumped at the lower area is about ten feet deep.

Exact dates and volumes were not known.

Cleaning of storm catch basins and disposal of debris extracted from basins has in the past been largely accomplished on a requested (either by residents or other crews) basis. Debris was deposited at several locations throughout the City depending on where they were cleaning. Most of those areas were around East 'T' and Wright Streets, Veterans Memorial Park on Highline Road, East 29th and 'R' and an area across the street from the Central Wastewater Treatment Plant.

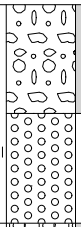
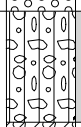
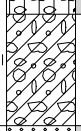
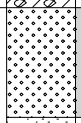
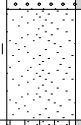
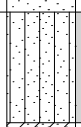
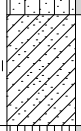
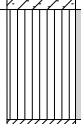
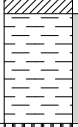
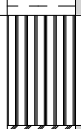
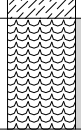
For the past two years, catch basins have been cleaned and inspected by area (a copy of area map is posted in the Maintenance Supervisor's office) and debris has been deposited in the 35th and Pacific Avenue dump site and across the street from the Central Wastewater Treatment Plant. With the recent closure of the Pacific Avenue dump site, debris was dumped primarily at the Tacoma Landfill. The following is a summation of the past five years' activities:

Year	Approx. # of CB's Cleaned	Approx. Amount of Debris
1985	1,390	231.6 cubic yards
1986	1,445	240.8 cubic yards
1987	2,105	350.8 cubic yards
1988	2,470	411.6 cubic yards
1989	3,322	553.6 cubic yards

(W0077S)

APPENDIX B

Boring and Well Construction Logs

Coarse-Grained Soils - More than 50%[1] Retained on No. 200 Sieve	Gravels - More than 50%[1] of Coarse Fraction Retained on No. 4 Sieve	≤5% Fines		GW	Well-graded GRAVEL Well-graded GRAVEL WITH SAND
				GP	Poorly-graded GRAVEL Poorly-graded GRAVEL WITH SAND
		≥15% Fines		GM	SILTY GRAVEL SILTY GRAVEL WITH SAND
				GC	CLAYEY GRAVEL CLAYEY GRAVEL WITH SAND
	Sands - 50%[1] or More of Coarse Fraction Passes No. 4 Sieve	≤5% Fines		SW	Well-graded SAND Well-graded SAND WITH GRAVEL
				SP	Poorly-graded SAND Poorly-graded SAND WITH GRAVEL
		≥15% Fines		SM	SILTY SAND SILTY SAND WITH GRAVEL
				SC	CLAYEY SAND CLAYEY SAND WITH GRAVEL
Fine-Grained Soils - 50%[1] or More Passes No. 200 Sieve	Silts and Clays Liquid Limit Less than 50%			ML	SILT SANDY or GRAVELLY SILT SILT WITH SAND SILT WITH GRAVEL
				CL	LEAN CLAY SANDY or GRAVELLY LEAN CLAY LEAN CLAY WITH SAND LEAN CLAY WITH GRAVEL
				OL	ORGANIC SILT SANDY or GRAVELLY ORGANIC SILT ORGANIC SILT WITH SAND ORGANIC SILT WITH GRAVEL
	Silts and Clays Liquid Limit 50% or More			MH	ELASTIC SILT SANDY or GRAVELLY ELASTIC SILT ELASTIC SILT WITH SAND ELASTIC SILT WITH GRAVEL
				CH	FAT CLAY SANDY or GRAVELLY FAT CLAY FAT CLAY WITH SAND FAT CLAY WITH GRAVEL
				OH	ORGANIC CLAY SANDY or GRAVELLY ORGANIC CLAY ORGANIC CLAY WITH SAND ORGANIC CLAY WITH GRAVEL
Highly Organic Soils				PT	PEAT and other mostly organic soils

"WITH SILT" or "WITH CLAY" means 5 to 15% silt and clay, denoted by a "-" in the group name; e.g., SP-SM • "SILTY" or "CLAYEY" means >15% silt and clay • "WITH SAND" or "WITH GRAVEL" means 15 to 30% sand and gravel. • "SANDY" or "GRAVELLY" means >30% sand and gravel. • "Well-graded" means approximately equal amounts of fine to coarse grain sizes • "Poorly graded" means unequal amounts of grain sizes • Group names separated by "/" means soil contains layers of the two soil types; e.g., SM/ML.

Soils were described and identified in the field in general accordance with the methods described in ASTM D2488. Where indicated in the log, soils were classified using ASTM D2487 or other laboratory tests as appropriate. Refer to the report accompanying these exploration logs for details.

1. Estimated or measured percentage by dry weight
2. (SPT) Standard Penetration Test (ASTM D1586)
3. Determined by SPT, DCPT (ASTM STP399) or other field methods. See report text for details.

GEOTECHNICAL LAB TESTS

MC	=	Natural Moisture Content
PS	=	Particle Size Distribution
FC	=	Fines Content (% < 0.075 mm)
GH	=	Hydrometer Test
AL	=	Atterberg Limits
C	=	Consolidation Test
Str	=	Strength Test
OC	=	Organic Content (% Loss by Ignition)
Comp	=	Proctor Test
K	=	Hydraulic Conductivity Test
SG	=	Specific Gravity Test

CHEMICAL LAB TESTS

Organic Chemicals

BTEX	=	Benzene, Toluene, Ethylbenzene, Xylenes
TPH-Dx	=	Diesel and Oil-Range Petroleum Hydrocarbons
TPH-G	=	Gasoline-Range Petroleum Hydrocarbons
VOCs	=	Volatile Organic Compounds
SVOCs	=	Semi-Volatile Organic Compounds
PAHs	=	Polycyclic Aromatic Hydrocarbon Compounds
PCBs	=	Polychlorinated Biphenyls

Metals

RCRA8	=	As, Ba, Cd, Cr, Pb, Hg, Se, Ag, (d = dissolved, t = total)
MTCA5	=	As, Cd, Cr, Hg, Pb (d = dissolved, t = total)
PP-13	=	Ag, As, Be, Cd, Cr, Cu, Hg, Ni, Pb, Sb, Se, Tl, Zn (d=dissolved, t=total)

FIELD TESTS

PID	=	Photoionization Detector
Sheen	=	Oil Sheen Test
SPT[2]	=	Standard Penetration Test
NSPT	=	Non-Standard Penetration Test
DCPT	=	Dynamic Cone Penetration Test

COMPONENT DEFINITIONS

Descriptive Term		*Size Range and Sieve Number*
Boulders	=	Larger than 12 inches
Cobbles	=	3 inches to 12 inches
Coarse Gravel	=	3 inches to 3/4 inches
Fine Gravel	=	3/4 inches to No. 4 (4.75 mm)
Coarse Sand	=	No. 4 (4.75 mm) to No. 10 (2.00 mm)
Medium Sand	=	No. 10 (2.00 mm) to No. 40 (0.425 mm)
Fine Sand	=	No. 40 (0.425 mm) to No. 200 (0.075 mm)
Silt and Clay	=	Smaller than No. 200 (0.075 mm)

ESTIMATED[1] PERCENTAGE

% by Weight		*Modifier*	*% by Weight*		*Modifier*
<1	=	Subtrace	15 to 25	=	Little
1 to <5	=	Trace	30 to 45	=	Some
5 to 10	=	Few	>50	=	Mostly

MOISTURE CONTENT

Dry	=	Absence of moisture, dusty, dry to the touch
Slightly Moist	=	Perceptible moisture
Moist	=	Damp but no visible water
Very Moist	=	Water visible but not free draining
Wet	=	Visible free water, usually from below water table

RELATIVE DENSITY

Non-Cohesive or Coarse-Grained Soils

Density[3]		*SPT*[2] *Blows/Foot*	*Penetration with 1/2" Diameter Rod*
Very Loose	=	0 to 4	≥ 2'
Loose	=	5 to 10	1' to 2'
Medium Dense	=	11 to 30	3" to 1'
Dense	=	31 to 50	1" to 3"
Very Dense	=	> 50	< 1"

CONSISTENCY

Cohesive or Fine-Grained Soils

Consistency[3]		*SPT*[2] *Blows/Foot*	*Manual Test*
Very Soft	=	0 to 1	Penetrated >1" easily by thumb. Extrudes between thumb & fingers.
Soft	=	2 to 4	Penetrated 1/4" to 1" easily by thumb. Easily molded.
Medium Stiff	=	5 to 8	Penetrated >1/4" with effort by thumb. Molded with strong pressure.
Stiff	=	9 to 15	Indented ~1/4" with effort by thumb.
Very Stiff	=	16 to 30	Indented easily by thumbnail.
Hard	=	> 30	Indented with difficulty by thumbnail.

GEOLOGIC CONTACTS

Observed and Distinct — Observed and Gradual — Inferred

Aspect CONSULTING

Exploration Log Key

AI Path: Q:_ACAD Standards\FIELD REFERENCE\MASTERS\Exploration Log Key-2018.ai // user: jinman // last saved: 12/31/2018

Aspect CONSULTING	35th and Pacific - AS220138B		Environmental Exploration Log	
	Project Address & Site Specific Location 3551, 3561 Pacific Ave, Tacoma, WA, see Figure 2		*Coordinates (Lat,Lon WGS84)* 47.2274, -122.4331	*Exploration Number* **AB-01**
Contractor Cascade Environmental	*Equipment* Geoprobe 7822DT	*Sampling Method* Percussion hammer	*Ground Surface Elev. (NAVD88)* 306'	
Operator Tim Watson	*Exploration Method(s)* Direct push	*Work Start/Completion Dates* 3/18/2025	*Top of Casing Elev. (NAVD88)* NA	*Depth to Water (Below GS)* 4.5' (ATD)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
0	305	Backfilled with gravel			PID=0.5 Sheen=none		GRAVEL (GP); Base course	0
							FILL SILTY SAND WITH GRAVEL (SM); slightly moist, dark brown; fine to coarse sand; fine to coarse subrounded to subangular gravel; subtrace roots.	
				AB-01-2.5	PID=0.9 Sheen=none		SAND WITH SILT AND GRAVEL (SP-SM); slightly moist, brown; fine to coarse sand; fine to coarse subrounded to subangular gravel.	
		▽ 3/17/2025						
5	300				PID=0.6 Sheen=none			5
		Backfilled with 3/8-inch bentonite chips			PID=0.4 Sheen=none PID=0.6 Sheen=none		SANDY SILT WITH GRAVEL (ML); slightly moist, brown; fine sand; fine to coarse subrounded to subangular gravel. Trace wood debris.	
10	295			AB-01-10	PID=1.3 Sheen=none		SANDY SILT (ML); slightly moist, dark brown; fine sand; fine to coarse subrounded to subangular gravel.	10
							SAND WITH GRAVEL (SP); slightly moist, brown to gray; fine to coarse sand; fine to coarse subrounded to subangular gravel.	
					PID=0.6 Sheen=none			
				AB-01-13 & AB-101-13	PID=0.9 Sheen=none			
15	290						Bottom of exploration at 15 ft. bgs. Note: CH4 levels were 0% at all depths.	15

Legend

Sample Type
- ◯ No Soil Sample Recovery
- ◧ Continuous core 1.85" ID

Water Level
- ▽ Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: FCE
Approved by: ALC

Exploration Log AB-01
Sheet 1 of 1

NEW STANDARD EXPLORATION LOG TEMPLATE \\ASP-BAI-01\PROJECTS\GINTW\PROJECTS\AS220138B MERCY HOUSING.GPJ June 3, 2025

Aspect CONSULTING	35th and Pacific - AS220138B		Environmental Exploration Log	
	Project Address & Site Specific Location 3551, 3561 Pacific Ave, Tacoma, WA, see Figure 2		*Coordinates (Lat,Lon WGS84)* 47.2270, -122.4337	*Exploration Number* **AB-02**
Contractor Cascade Environmental	*Equipment* Geoprobe 7822DT	*Sampling Method* Percussion hammer	*Ground Surface Elev. (NAVD88)* 308'	
Operator Tim Watson	*Exploration Method(s)* Direct push	*Work Start/Completion Dates* 3/17/2025	*Top of Casing Elev. (NAVD88)* NA	*Depth to Water (Below GS)* No Water Encountered

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
0	308	Backfilled with gravel			PID=0.7 Sheen=none		GRAVEL (GP); Base course **FILL** GRAVEL WITH SAND (GP); slightly moist, dark brown; fine to coarse sand; fine to coarse subrounded to subangular gravel.	0
				AB-02-2	PID=1.0 Sheen=none		SILTY SAND WITH GRAVEL (SM); slightly moist, dark gray; fine to coarse sand; fine to coarse subrounded to subangular gravel.	
5	305			AB-02-5	PID=0.8 Sheen=none PID=0.7 Sheen=none		SAND WITH SILT (SP-SM); very moist to wet, dark brown; fine to medium sand; subtrace subrounded to subangular gravel.	5
		Backfilled with 3/8-inch bentonite chips						
10	300				PID=0.8 Sheen=none		SAND WITH SILT AND GRAVEL (SP-SM); wet, gray; fine to coarse sand; trace fine to coarse subrounded to subangular gravel.	10
					PID=0.9 Sheen=none		Reduced moisture content; fine to coarse sand; increased gravel content.	
15	295			AB-02-13	PID=1.1 Sheen=none		Bottom of exploration at 15 ft. bgs. Note: CH4 levels were 0% at all depths.	15
	290							

Legend

Sample Type
- ◯ No Soil Sample Recovery
- ◧ Continuous core 1.85" ID

Water Level
- No Water Encountered

See Exploration Log Key for explanation of symbols

Logged by: FCE
Approved by: ALC

Exploration Log AB-02
Sheet 1 of 1

NEW STANDARD EXPLORATION LOG TEMPLATE \\ASP-BAI-01\PROJECTS\GINTW\PROJECTS\AS220138B MERCY HOUSING.GPJ June 3, 2025

Aspect CONSULTING	35th and Pacific - AS220138B		Environmental Exploration Log	
	Project Address & Site Specific Location 3551, 3561 Pacific Ave, Tacoma, WA, see Figure 2		*Coordinates (Lat,Lon WGS84)* 47.2280, -122.4339	*Exploration Number* **AB-06**
Contractor Cascade Environmental	*Equipment* Terra Sonic 150CC	*Sampling Method* Grab; Autohammer	*Ground Surface Elev. (NAVD88)* 306'	
Operator Taggart Knutson	*Exploration Method(s)* Sonic	*Work Start/Completion Dates* 1/9/2025 to 1/10/2025	*Top of Casing Elev. (NAVD88)* NA	*Depth to Water (Below GS)* 35' (ATD)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
0	305	Backfilled with surrounding soil			PID=0.0 Sheen=none		TOPSOIL; roots, vegetation.	0
							FILL	
				AB-06-1.5	PID=0.3 Sheen=none		SILTY SAND (SM); medium dense, moist, brown to dark brown; fine to coarse sand: fine to coarse subrounded to subangular gravel; trace organics.	
				S-1	SPT=9,10,10 PID=0.1 Sheen=none			
					PID=0.1 Sheen=none			
5	300			S-2	SPT=7,6,6 PID=0.1 Sheen=none		Decrease in fines from 5 to 7.5 feet.	5
				AB-06-7				
				S-3	SPT=11,12,16 PID=0.2 Sheen=none		SAND WITH SILT AND GRAVEL (SP-SM); medium dense, moist, brown; fine to coarse sand; fine to coarse subrounded to subangular gravel.	
					PID=0.2 Sheen=none			
10	295			S-4	SPT=8,12,14 PID=0.1 Sheen=none		SILTY SAND WITH GRAVEL (SM); medium dense, moist, brown; fine to coarse sand; fine to coarse subrounded to subangular gravel.	10
				AB-06-11.5				
				S-5	SPT=10,50,22 PID=0.1 Sheen=none		Becomes dense, gray.	
					PID=0.1 Sheen=none			
15	290	Backfilled with 3/8-inch bentonite chips		S-6	SPT=17,22,21 PID=0.1 Sheen=none			15
				AB-06-17				
				S-7	SPT=18,17,18 PID=0.3 Sheen=none			
					PID=0.1 Sheen=none			
				AB-06-19	PID=0.3 Sheen=none			
20	285			S-8	SPT=21,26,25 PID=0.3 Sheen=none			20
					PID=0.3 Sheen=none			
					PID=0.1 Sheen=none			
25	280			S-9	SPT=20,14,14 PID=0.3 Sheen=none		Becomes medium dense.	25
					PID=0.0 Sheen=none			
				AB-06-28	PID=1.0 Sheen=none			
					PID=0.4 Sheen=none		becomes black	
30	275			S-10	SPT=4,7,13			30
					PID=5.9 Sheen=none		CONCRETE; concrete debris	
				AB-06-33	PID=8.4 Sheen=none		SILTY SAND (SM); medium dense, very moist to wet, dark gray; fine sand to coarse sand; few subrounded to subangular gravel; concrete debris to ~35'.	
		▽ 1/10/2025						

Legend

Sample Type
- ◯ No Soil Sample Recovery
- ◧ Continuous core 6" ID
- ◩ Grab sample
- ◪ Split Barrel 2" X 1.375" (SPT)

Water Level
- ▽ Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: FCE
Approved by: ECS

Exploration Log AB-06

Sheet 1 of 3

NEW STANDARD EXPLORATION LOG TEMPLATE \\ASP-BAI-01\PROJECTS\GINTW\PROJECTS\AS220138B MERCY HOUSING.GPJ June 3, 2025

Aspect CONSULTING	35th and Pacific - AS220138B		Environmental Exploration Log	
	Project Address & Site Specific Location 3551, 3561 Pacific Ave, Tacoma, WA, see Figure 2		*Coordinates (Lat,Lon WGS84)* 47.2280, -122.4339	*Exploration Number* **AB-06**
Contractor Cascade Environmental	*Equipment* Terra Sonic 150CC	*Sampling Method* Grab; Autohammer	*Ground Surface Elev. (NAVD88)* 306'	
Operator Taggart Knutson	*Exploration Method(s)* Sonic	*Work Start/Completion Dates* 1/9/2025 to 1/10/2025	*Top of Casing Elev. (NAVD88)* NA	*Depth to Water (Below GS)* 35' (ATD)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
					SPT=7,8,9 PID=0.2 Sheen=none		Free water recovered in sampler	
	270			S-11				
					PID=0.4 Sheen=none		SAND WITH SILT (SP-SM); dense to very dense, moist to very moist, brown; fine to medium sand; trace fine to coarse subrounded to subangular gravel.	
					PID=0.3 Sheen=none			
40					SPT=23,50/6" PID=0.2 Sheen=none			40
	265			S-12				
				AB-06-42	PID=2.0 Sheen=none		SILTY SAND (SM); very dense, moist, brown; fine to coarse sand; few fine to coarse subrounded to subangular gravel.	
					PID=1.9 Sheen=none			
45					SPT=15,44,50/5" PID=0.5 Sheen=none			45
	260			S-13				
					PID=1.1 Sheen=none		SAND WITH SILT (SP-SM); dense to very dense, moist, brown; fine to medium sand.; few fine to coarse, subrounded gravel.	
				AB-06-48	PID=1.5 Sheen=none			
					PID=1.2 Sheen=none			
50					SPT=14,32,34 PID=2.6 Sheen=none			50
	255			S-14				
					PID=1.4 Sheen=none			
					PID=3.0 Sheen=none			
55					SPT=14,18,20 PID=0.8 Sheen=none			55
	250			S-15				
				AB-06-57	PID=2.0 Sheen=none		Increased gravel content.	
					PID=1.3 Sheen=none			
60					SPT=24,30,50/6" PID=2.1 Sheen=none		SILTY SAND WITH GRAVEL (SM); very dense, moist, gray; fine to coarse sand; fine to coarse subrounded to subangular gravel.	60
	245			S-16	PID=2.7 Sheen=none			
					PID=1.0 Sheen=none		Becomes light brown to light gray.	
					PID=0.8 Sheen=none		Trace concrete debris.	
65					SPT=25,35,45 PID=0.8 Sheen=none			65
	240			S-17				
				AB-06-67.5	PID=1.0 Sheen=none			
					PID=0.7 Sheen=none		Concrete debris.	

Legend

Sample Type
- No Soil Sample Recovery
- Continuous core 6" ID
- Grab sample
- Split Barrel 2" X 1.375" (SPT)

Water Level
- Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: FCE
Approved by: ECS

Exploration Log AB-06

Sheet 2 of 3

NEW STANDARD EXPLORATION LOG TEMPLATE \\ASP-BAI-01\PROJECTS\GINTW\PROJECTS\AS220138B MERCY HOUSING.GPJ June 3, 2025

Aspect CONSULTING	35th and Pacific - AS220138B		Environmental Exploration Log	
	Project Address & Site Specific Location 3551, 3561 Pacific Ave, Tacoma, WA, see Figure 2		*Coordinates (Lat,Lon WGS84)* 47.2280, -122.4339	*Exploration Number* **AB-06**
Contractor Cascade Environmental	*Equipment* Terra Sonic 150CC	*Sampling Method* Grab; Autohammer	*Ground Surface Elev. (NAVD88)* 306'	
Operator Taggart Knutson	*Exploration Method(s)* Sonic	*Work Start/Completion Dates* 1/9/2025 to 1/10/2025	*Top of Casing Elev. (NAVD88)* NA	*Depth to Water (Below GS)* 35' (ATD)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
	235			S-18	SPT=50/6" PID=0.8 Sheen=none PID=0.8 Sheen=none		SILTY SAND WITH GRAVEL (SM); very dense, moist, gray; fine to coarse sand; fine to coarse subrounded to subangular gravel. (continued) Becomes very moist Becomes light brown.	
					PID=1.2 Sheen=none			
					PID=1.5 Sheen=none		Becomes brown.	
75								75
	230			S-19	SPT=31,35,35 PID=1.1 Sheen=none		Approximate 2' thick layer of SP-SM from 75 to 77 feet.	
					PID=0.3 Sheen=none		**VASHON TILL** SAND WITH SILT (SP-SM); dense, moist, brown; fine to medium sand; trace fine to coarse subrounded to subangular gravel.	
				AB-06-79	PID=1.2 Sheen=none			
80								80
	225			S-20	SPT=15,20,23 PID=0.2 Sheen=none		Bottom of exploration at 81.5 ft. bgs. Note: No sheen or odor observed throughout. CH4 levels were 0% at all depths.	
85								85
	220							
90								90
	215							
95								95
	210							
100								100
	205							

Legend

Sample Type
- No Soil Sample Recovery
- Continuous core 6" ID
- Grab sample
- Split Barrel 2" X 1.375" (SPT)

Water Level
- Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: FCE
Approved by: ECS

Exploration Log AB-06
Sheet 3 of 3

NEW STANDARD EXPLORATION LOG TEMPLATE \\ASP-BAI-01\PROJECTS\GINTW\PROJECTS\AS220138B MERCY HOUSING.GPJ June 3, 2025

Aspect CONSULTING	35th and Pacific - AS220138B		Environmental Exploration Log	
	Project Address & Site Specific Location 3551, 3561 Pacific Ave, Tacoma, WA, see Figure 2		*Coordinates (Lat,Lon WGS84)* 47.2279, -122.4331	*Exploration Number* **AB-07**
Contractor Cascade Environmental	*Equipment* Terra Sonic 150CC	*Sampling Method* Grab; Autohammer	*Ground Surface Elev. (NAVD88)* 305'	
Operator Joe Staloch	*Exploration Method(s)* Sonic	*Work Start/Completion Dates* 1/13/2025 to 1/16/2025	*Top of Casing Elev. (NAVD88)* NA	*Depth to Water (Below GS)* 10' (ATD)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
		Backfilled with surrounding soil			PID=0.2 Sheen=none		TOPSOIL; roots, vegetation.	
							FILL SILTY SAND WITH GRAVEL (SM); medium dense, moist, brown; fine to coarse sand; fine to coarse subrounded to subangular gravel; trace organics.	
				AB-07-3 S-1	SPT=12,11,12 PID=0.1 Sheen=none			
					PID=0.3 Sheen=none			
5	300			S-2	SPT=11,10,13 PID=0.3 Sheen=none			5
				AB-07-7				
				S-3	SPT=12,18,19 PID=0.2 Sheen=none		Becomes dense and gray brown	
					PID=0.5 Sheen=none			
10	295	▽ 1/13/2025		S-4	SPT=25,36,43 PID=0.1 Sheen=0none		Becomes very dense and wet	10
					PID=0.1 Sheen=none			
				AB-07-12	PID=0.9 Sheen=none		Driller reports heavy drill action at 12 feet. Increased gravel content.	
					PID=0.2 Sheen=none		SAND WITH SILT (SP-SM); medium dense, moist, brown; fine to coarse sand; trace fine to coarse subrounded to subangular gravel.	
15	290	Backfilled with 3/8-inch bentonite chips		S-5	SPT=12,10,10 PID=0.1 Sheen=none		SAND WITH SILT AND GRAVEL (SP-SM); medium dense, moist, brown; fine to coarse sand; fine to coarse subrounded to subangular gravel; subtrace asphalt and concrete.	15
				AB-07-17.5 S-6	SPT=11,12,18 PID=0.1 Sheen=none		SILTY SAND WITH GRAVEL (SM); medium dense, wet, brown; fine to coarse sand; fine to coarse subrounded to subangular gravel; trace roots. Concrete debris.	
					PID=0.0 Sheen=none			
20	285			S-7	SPT=1,2,4 PID=0.2 Sheen=none		Becomes loose; free water recovered in sampler.	20
					PID=0.2 Sheen=none			
					PID=0.1 Sheen=none			
25	280			S-8	SPT=35,25,35 PID=0.5 Sheen=none		Becomes blue-gray. Becomes very dense.	25
				AB-07-27.5	PID=1.2 Sheen=none		GRAVEL WITH SILT AND SAND (GP-GM); very dense, very moist, gray; fine to coarse sand; fine to coarse subrounded to subangular gravel. Becomes wet with reduced sand content.	
					PID=0.7 Sheen=none			
30	275			S-9	SPT=28,35,50/6" PID=0.4 Sheen=none			30
					PID=0.6 Sheen=none			
					PID=0.9 Sheen=none		Concrete debris. Becomes gray.	
					PID=0.2 Sheen=none			

Legend

Sample Type
- ◯ No Soil Sample Recovery
- ◫ Continuous core 6" ID
- ◪ Split Barrel 2" X 1.375" (SPT)
- Grab sample

Water Level
- ▽ Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: FCE
Approved by: ECS

Exploration Log AB-07

Sheet 1 of 4

NEW STANDARD EXPLORATION LOG TEMPLATE \\ASP-BAI-01\PROJECTS\GINTW\PROJECTS\AS220138B MERCY HOUSING.GPJ June 3, 2025

Aspect CONSULTING	35th and Pacific - AS220138B		Environmental Exploration Log	
	Project Address & Site Specific Location 3551, 3561 Pacific Ave, Tacoma, WA, see Figure 2		*Coordinates (Lat,Lon WGS84)* 47.2279, -122.4331	*Exploration Number* **AB-07**
Contractor Cascade Environmental	*Equipment* Terra Sonic 150CC	*Sampling Method* Grab; Autohammer	*Ground Surface Elev. (NAVD88)* 305'	
Operator Joe Staloch	*Exploration Method(s)* Sonic	*Work Start/Completion Dates* 1/13/2025 to 1/16/2025	*Top of Casing Elev. (NAVD88)* NA	*Depth to Water (Below GS)* 10' (ATD)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
				S-10	SPT=10,27,40 PID=1.1 Sheen=none		SILTY SAND WITH GRAVEL (SM); very dense, moist, gray; fine to coarse sand; fine to coarse subrounded to subangular gravel.	
				AB-07-37	PID=1.3 Sheen=none		Becomes gray brown.	
					PID=1.0 Sheen=none			
40	265			S-11	SPT=35,50/6" PID=3.4 Sheen=none		Becomes wet.	40
				AB-07-42 & AB-101-42	PID=4.8 Sheen=none			
					PID=4.2 Sheen=none			
45	260			S-12	SPT=12,40,43 PID=0.9 Sheen=none			45
					PID=2.1 Sheen=none			
				AB-07-49	PID=2.9 Sheen=none			
50	255			S-13	SPT=17,24,32 PID=1.9 Sheen=none			50
					PID=5.1 Sheen=none			
					PID=3.2 Sheen=none			
55	250			S-14	SPT=50/6" PID=2.6 Sheen=none			55
				AB-07-57.5	PID=3.3 Sheen=none			
					PID=2.3 Sheen=none			
60	245			S-15	SPT=6,10,15 PID=1.8 Sheen=none		Becomes medium dense.	60
				AB-07-63	PID=4.7 Sheen=none			
					PID=1.3 Sheen=none			
65	240			S-16	SPT=15,50/6" PID=2.7 Sheen=none		Becomes very dense.	65
					PID=3.2 Sheen=none		Becomes brown with increased gravel content.	
							Becomes dark gray.	
					PID=2.3 Sheen=none		Becomes light gray.	

Legend

Sample Type
- No Soil Sample Recovery
- Continuous core 6" ID
- Split Barrel 2" X 1.375" (SPT)
- Grab sample

Water Level
- Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: FCE
Approved by: ECS

Exploration Log AB-07
Sheet 2 of 4

NEW STANDARD EXPLORATION LOG TEMPLATE \\ASP-BAI-01\PROJECTS\GINTW\PROJECTS\AS220138B MERCY HOUSING.GPJ June 3, 2025

Aspect CONSULTING	35th and Pacific - AS220138B		Environmental Exploration Log	
	Project Address & Site Specific Location 3551, 3561 Pacific Ave, Tacoma, WA, see Figure 2		*Coordinates (Lat,Lon WGS84)* 47.2279, -122.4331	*Exploration Number* **AB-07**
Contractor Cascade Environmental	*Equipment* Terra Sonic 150CC	*Sampling Method* Grab; Autohammer	*Ground Surface Elev. (NAVD88)* 305'	
Operator Joe Staloch	*Exploration Method(s)* Sonic	*Work Start/Completion Dates* 1/13/2025 to 1/16/2025	*Top of Casing Elev. (NAVD88)* NA	*Depth to Water (Below GS)* 10' (ATD)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
				S-17	SPT=50/3" PID=2.5 Sheen=none		SILTY SAND WITH GRAVEL (SM); very dense, moist, gray; fine to coarse sand; fine to coarse subrounded to subangular gravel. (continued)	
							Becomes dark brown.	
				AB-07-72.5	PID=5.0 Sheen=none		Trace wood debris.	
					PID=2.6 Sheen=none			
75	230			S-18	SPT=21,50/6" PID=7.0 Sheen=none		Becomes very moist to wet.	75
					PID=7.5 Sheen=none			
					PID=6.9 Sheen=none			
80	225			S-19	SPT=17,50/6" PID=3.1 Sheen=none			80
					PID=6.8 Sheen=none		Becomes gray brown to light brown.	
					PID=2.2 Sheen=none			
				AB-07-84	PID=7.2 Sheen=none			
85	220			S-20	SPT=11,13,14 PID=6.0 Sheen=none		Becomes medium dense.	85
					PID=6.8 Sheen=none			
					PID=4.7 Sheen=none			
90	215			S-21	SPT=6,13,18 PID=0.8 Sheen=none		Becomes dense and gray brown.	90
					PID=0.6 Sheen=none			
					PID=2.7 Sheen=none			
95	210			S-22	SPT=6,14,12			95
					PID=1.3 Sheen=none			
					PID=0.6 Sheen=none			
					PID=0.8 Sheen=none			
100	205			S-23	SPT=3,7,7 PID=0.6 Sheen=none		Blowcounts affected by heaving from 100 to 105 feet.	100
					PID=0.7 Sheen=none			
					PID=0.5 Sheen=none			

Legend

Sample Type
- No Soil Sample Recovery
- Continuous core 6" ID
- Split Barrel 2" X 1.375" (SPT)
- Grab sample

Water Level
- Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: FCE
Approved by: ECS

Exploration Log AB-07

Sheet 3 of 4

NEW STANDARD EXPLORATION LOG TEMPLATE \\ASP-BAI-01\PROJECTS\GINTW\PROJECTS\AS220138B MERCY HOUSING.GPJ June 3, 2025

Aspect CONSULTING	35th and Pacific - AS220138B		Environmental Exploration Log	
	Project Address & Site Specific Location 3551, 3561 Pacific Ave, Tacoma, WA, see Figure 2		*Coordinates (Lat,Lon WGS84)* 47.2279, -122.4331	*Exploration Number* **AB-07**
Contractor Cascade Environmental	*Equipment* Terra Sonic 150CC	*Sampling Method* Grab; Autohammer	*Ground Surface Elev. (NAVD88)* 305'	
Operator Joe Staloch	*Exploration Method(s)* Sonic	*Work Start/Completion Dates* 1/13/2025 to 1/16/2025	*Top of Casing Elev. (NAVD88)* NA	*Depth to Water (Below GS)* 10' (ATD)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
110	195			S-24 AB-07-107.5 S-25	SPT=2,3,5 PID=0.6 Sheen=none PID=0.7 Sheen=none PID=0.5 Sheen=none SPT=2,3,9		**VASHON TILL** SILTY SAND WITH GRAVEL (SM); medium dense, wet, gray; fine to coarse sand; fine to coarse subrounded to subangular gravel. (continued) Blowcounts affected by heave from 105 to 110 feet.	110
							Bottom of exploration at 111.5 ft. bgs. Note: No sheen or odor observed throughout. CH4 levels were 0% at all depths.	
115	190							115
120	185							120
125	180							125
130	175							130
135	170							135

Legend

Sample Type
- No Soil Sample Recovery
- Continuous core 6" ID
- Split Barrel 2" X 1.375" (SPT)
- Grab sample

Water Level
- Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: FCE
Approved by: ECS

Exploration Log AB-07
Sheet 4 of 4

NEW STANDARD EXPLORATION LOG TEMPLATE \\ASP-BAI-01\PROJECTS\GINTW\PROJECTS\AS220138B MERCY HOUSING.GPJ June 3, 2025

Aspect CONSULTING	35th and Pacific - AS220138B		Environmental Exploration Log	
	Project Address & Site Specific Location 3551, 3561 Pacific Ave, Tacoma, WA, see Figure 2		*Coordinates (Lat,Lon WGS84)* 47.2282, -122.4337	*Exploration Number* **AB-08**
Contractor Cascade Environmental	*Equipment* Terra Sonic 150CC	*Sampling Method* Grab; Autohammer	*Ground Surface Elev. (NAVD88)* 307'	
Operator Joe Staloch	*Exploration Method(s)* Sonic	*Work Start/Completion Dates* 1/6/2025 to 1/8/2025	*Top of Casing Elev. (NAVD88)* NA	*Depth to Water (Below GS)* 55' (ATD)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
		Backfilled with surrounding soil			PID=0.0 Sheen=none		TOPSOIL; roots, vegetation.	
							FILL	
	305						SILTY SAND WITH GRAVEL (SM); medium dense, slightly moist, brown; fine to coarse sand; fine to coarse subrounded to subangular gravel; trace subrounded to subangular cobbles; trace to some roots.	
				AB-08-2.5 S-1	SPT=3,13,8 PID=0.0 Sheen=none		Becomes dark brown; reduced silt content; trace asphalt.	
					PID=0.0 Sheen=none			
5					SPT=5,3,2 PID=0.0 Sheen=none		Becomes loose, light gray to dark brown; trace roots; trace asphalt.	5
				S-2 AB-08-6	PID=0.0 Sheen=none			
	300							
					SPT=7,5,6 PID=0.0 Sheen=none		Becomes medium dense. Concrete debris.	
				S-3				
					PID=0.0 Sheen=none		Brick debris. Increased silt content. Becomes loose.	
10					SPT=5,4,4 PID=0.0 Sheen=none			10
				S-4				
	295			AB-08-12	PID=0.0 Sheen=none		Becomes medium dense.	
					SPT=4,6,25			
				S-5				
					PID=0.0 Sheen=none		Becomes dark brown. Concrete debris.	
15		Backfilled with 3/8-inch bentonite chips			SPT=6,6,6 PID=0.1 Sheen=none			15
				S-6				
	290			AB-08-17				
					SPT=7,5,4 PID=0.2 Sheen=none		Becomes loose.	
				S-7	PID=0.3 Sheen=none			
					PID=0.5 Sheen=none			
20					SPT= 5,4,4 PID=0.3 Sheen=none		Becomes brown. Driller reports hard drill action between 20 and 25 feet.	20
				S-8	PID=0.3 Sheen=none			
	285							
					PID=0.5 Sheen=none			
					PID=0.5 Sheen=none			
25				AB-08-25 S-9	SPT=4.4,3 PID=0.2 Sheen=none			25
	280				PID=0.5 Sheen=none			
					PID=0.4 Sheen=none			
30					SPT=15,25,25 PID=6.4 Sheen=none		Becomes dense.	30
				S-10	PID=4.8 Sheen=none			
	275				PID=12.1 Sheen=none			
				AB-08-32.5	PID=11.6 Sheen=none			
					PID=10.4 Sheen=none			

Legend

Sample Type
- No Soil Sample Recovery
- Continuous core 6" ID
- Split Barrel 2" X 1.375" (SPT)
- Grab sample

Water Level
- Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: FCE
Approved by: ECS

Exploration Log AB-08

Sheet 1 of 3

NEW STANDARD EXPLORATION LOG TEMPLATE \\ASP-BAI-01\PROJECTS\GINTW\PROJECTS\AS220138B MERCY HOUSING.GPJ June 3, 2025

Aspect CONSULTING	35th and Pacific - AS220138B		Environmental Exploration Log	
	Project Address & Site Specific Location 3551, 3561 Pacific Ave, Tacoma, WA, see Figure 2		*Coordinates (Lat,Lon WGS84)* 47.2282, -122.4337	*Exploration Number* **AB-08**
Contractor Cascade Environmental	*Equipment* Terra Sonic 150CC	*Sampling Method* Grab; Autohammer	*Ground Surface Elev. (NAVD88)* 307'	
Operator Joe Staloch	*Exploration Method(s)* Sonic	*Work Start/Completion Dates* 1/6/2025 to 1/8/2025	*Top of Casing Elev. (NAVD88)* NA	*Depth to Water (Below GS)* 55' (ATD)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
				S-11	SPT=28,38,31 PID=1.2 Sheen=none		SAND WITH SILT AND GRAVEL (SP-SM); very dense, moist, light brown; fine to medium sand; few fine to coarse subrounded to subangular gravel.	
	270				PID=1.3 Sheen=none		SILTY SAND WITH GRAVEL (SM); dense, slightly moist, light brown; fine to coarse sand; fine to coarse subrounded to subangular gravel.	
					PID=1.5 Sheen=none			
					PID=1.0 Sheen=none			
40				S-12	SPT=26,27,16 PID=2.5 Sheen=none		Increase in gravel content from 40 to 45 feet.	40
	265				PID=3.7 Sheen=none		Becomes light gray.	
					PID=4.7 Sheen=none			
					PID=4.3 Sheen=none			
45				S-13	SPT=4,15,18 PID=3.8 Sheen=none		Becomes dark gray. Becomes brown. Driller reports hard drill action between 45 and 50 feet.	45
	260			AB-08-47.5	PID=4.0 Sheen=none			
					PID=3.9 Sheen=none			
50				S-14	SPT=9,11,10 PID=2.0 Sheen=none		Becomes medium dense, gray.	50
	255				PID=5.4 Sheen=none			
				AB-08-54 & AB-101-54	PID=10.0 Sheen=none		Becomes light gray to light brown.	
55		▽ 1/7/2025			SPT=4,5,8 PID=0.4 Sheen=none		Becomes dark gray to dark brown. Becomes very moist to wet; reduced gravel content.	55
	250			S-15	PID=0.7 Sheen=none		Becomes moist, brown.	
					PID=0.5 Sheen=none			
60				S-16	SPT=10,23,25 PID=2.3 Sheen=none		Becomes dense, dark gray.	60
	245				PID=4.8 Sheen=none			
					PID=4.0 Sheen=none			
					PID=4.7 Sheen=none			
65				S-17	SPT=24,24,29 PID=0.9 Sheen=none		SAND WITH SILT AND GRAVEL (SP-SM); dense, moist, brown; fine to coarse sand; fine to coarse subrounded to subangular gravel.	65
	240			AB-08-67	PID=7.4 Sheen=none		Increased gravel content.	
					PID=2.4 Sheen=none			
					PID=2.8 Sheen=none			

Legend

Sample Type
- No Soil Sample Recovery
- Continuous core 6" ID
- Split Barrel 2" X 1.375" (SPT)
- Grab sample

Water Level
- ▽ Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: FCE
Approved by: ECS

Exploration Log AB-08

Sheet 2 of 3

NEW STANDARD EXPLORATION LOG TEMPLATE \\ASP-BAI-01\PROJECTS\GINTW\PROJECTS\AS220138B MERCY HOUSING.GPJ June 3, 2025

Aspect CONSULTING	35th and Pacific - AS220138B		Environmental Exploration Log	
	Project Address & Site Specific Location 3551, 3561 Pacific Ave, Tacoma, WA, see Figure 2		*Coordinates (Lat,Lon WGS84)* 47.2282, -122.4337	*Exploration Number* **AB-08**
Contractor Cascade Environmental	*Equipment* Terra Sonic 150CC	*Sampling Method* Grab; Autohammer	*Ground Surface Elev. (NAVD88)* 307'	
Operator Joe Staloch	*Exploration Method(s)* Sonic	*Work Start/Completion Dates* 1/6/2025 to 1/8/2025	*Top of Casing Elev. (NAVD88)* NA	*Depth to Water (Below GS)* 55' (ATD)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
				S-18	SPT=24,50,50/6" PID=0.8 Sheen=none PID=2.5 Sheen=none		SILTY SAND WITH GRAVEL (SM); dense, moist, gray-brown; fine to coarse sand; fine to coarse subrounded to subangular gravel.	
	235				PID=2.7 Sheen=none			
					PID=1.5 Sheen=none			
75				S-19	SPT=30,50,50/6" PID=0.7 Sheen=none			75
	230			AB-08-77	PID=0.5 Sheen=none		SAND WITH SILT (SP-SM); dense, moist, brown; fine to medium sand.	
					PID=0.4 Sheen=none			
80				S-20	SPT=17,37,50/6" PID=1.5 Sheen=none		Driller reports heaving soil between 80 to 85 feet.	80
	225				PID=3.1 Sheen=none		SILTY SAND WITH GRAVEL (SM); very dense, moist, gray; fine to coarse sand; fine to coarse subrounded to subangular gravel; trace subrounded to subangular cobbles.	
				AB-08-83	PID=3.5 Sheen=none			
					PID=2.7 Sheen=none			
85				AB-08-85 S-21	SPT=10,50,30 PID=0.8 Sheen=none		**VASHON TILL** SILTY SAND (SM); dense, wet, brown; fine to medium sand; trace fine to coarse subrounded to subangular gravel.	85
	220				PID=0.9 Sheen=none			
90				S-22	PID=2.4 Sheen=none SPT=6,11,20			90
	215						Bottom of exploration at 91.5 ft. bgs. Note: No sheen or odor observed throughout. CH4 levels were 0% at all depths.	
95								95
	210							
100								100
	205							

Legend

Sample Type
- No Soil Sample Recovery
- Continuous core 6" ID
- Split Barrel 2" X 1.375" (SPT)
- Grab sample

Water Level
- Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: FCE
Approved by: ECS

Exploration Log AB-08

Sheet 3 of 3

NEW STANDARD EXPLORATION LOG TEMPLATE \\ASP-BAI-01\PROJECTS\GINTW\PROJECTS\AS220138B MERCY HOUSING.GPJ June 3, 2025

Aspect CONSULTING	35th and Pacific - AS220138B		Environmental Exploration Log	
	Project Address & Site Specific Location 3551, 3561 Pacific Ave, Tacoma, WA, see Figure 2		*Coordinates (Lat,Lon WGS84)* 47.2275, -122.4337	*Exploration Number* **AGP-01**
Contractor Cascade Environmental	*Equipment* Geoprobe 7822DT	*Sampling Method* Percussion hammer	*Ground Surface Elev. (NAVD88)* 306'	Ecology Well Tag No. BQK 007
Operator Tim Watson	*Exploration Method(s)* Direct push	*Work Start/Completion Dates* 3/17/2025	*Top of Casing Elev. (NAVD88)* NA	*Depth to Water (Below GS)* No Water Encountered

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
0	305	8" Flush mount, traffic-rated monument in concrete 0.17" x 0.25" fluoropolymer tubing Granular bentonite chips 12/20 silica sand Stainless steel 6" vapor screen		AGP-01-2	PID=0.0 Sheen=none PID=0.1 Sheen=none		GRAVEL (GP); Base course **FILL** SILTY SAND WITH GRAVEL (SM); slightly moist, dark gray; fine to coarse sand; fine to coarse subrounded gravel. Becomes black: trace fine to coarse gravel and cobbles. Trace fine to coarse subrounded to subangular cobbles.	
5	300			AGP-01-7.5	PID=0.0 Sheen=none PID=0.1 Sheen=none		SILTY SAND WITH GRAVEL (SM); wet, dark brown; fine to coarse sand; fine to coarse subrounded to subangular gravel. SAND WITH SILT (SP-SM); moist, dark brown to dark gray; fine to medium sand. SAND WITH GRAVEL (SP); slightly moist, brown to yellow brown; fine to medium sand; fine to coarse subrounded to subangular gravel.	5
10	295			AGP-01-12.5	PID=0.0 Sheen=none PID=0.0 Sheen=none		SILTY SAND (SM); slightly moist, dark gray; fine to coarse sand. SILTY SAND WITH GRAVEL (SM); slightly moist, brown; fine to coarse sand; fine to coarse subrounded to subangular gravel.	10
15	290						Bottom of exploration at 15 ft. bgs. Note: CH4 levels were 0% at all depths.	15

Legend

Sample Type
- ◯ No Soil Sample Recovery
- ◧ Continuous core 1.85" ID

Water Level
- No Water Encountered

See Exploration Log Key for explanation of symbols

Logged by: FCE
Approved by: ALC

Exploration Log AGP-01
Sheet 1 of 1

NEW STANDARD EXPLORATION LOG TEMPLATE \\ASP-BAI-01\PROJECTS\GINTW\PROJECTS\AS220138B MERCY HOUSING.GPJ June 3, 2025

Aspect CONSULTING	35th and Pacific - AS220138B		Environmental Exploration Log	
	Project Address & Site Specific Location 3551, 3561 Pacific Ave, Tacoma, WA, see Figure 2		*Coordinates (Lat,Lon WGS84)* 47.2278, -122.4330	*Exploration Number* **AGP-02**
Contractor Cascade Environmental	*Equipment* Geoprobe 7822DT	*Sampling Method* Percussion hammer	*Ground Surface Elev. (NAVD88)* 307'	Ecology Well Tag No. BQK 009
Operator Tim Watson	*Exploration Method(s)* Direct push	*Work Start/Completion Dates* 3/18/2025	*Top of Casing Elev. (NAVD88)* NA	*Depth to Water (Below GS)* 9.2' (ATD)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
0	307	8" Flush mount, traffic-rated monument in concrete 0.17" x 0.25" fluoropolymer tubing			PID=0.5 Sheen=none		GRAVEL (GP); Base course **FILL** SILTY SAND WITH GRAVEL (SM); slightly moist, dark brown to dark gray; fine to coarse sand; fine to coarse subrounded to subangular gravel.	0
				AGP-02-1.5	PID=0.7 Sheen=none			
	305	Granular bentonite chips						
		12/20 silica sand Stainless steel 6" vapor screen						
5					PID=1.0 Sheen=none		Becomes dark brown.	5
	300						SAND WITH SILT AND GRAVEL (SP-SM); moist, brown; fine to coarse sand; fine to coarse subrounded to subangular gravel.	
				AGP-02-8	PID=1.2 Sheen=none		Iron oxidizing staining. Becomes very moist.	
		▽ 3/18/2025			PID=0.8 Sheen=none			
10					PID=0.5 Sheen=none		Becomes wet.	10
	295			AGP-02-12.5	PID=0.7 Sheen=none		Reduced moisture content. Subtrace cobble.	
15					PID=0.6 Sheen=none		Bottom of exploration at 15 ft. bgs. Note: CH4 levels were 0% at all depths.	15
	290							

Legend

Sample Type
- ◯ No Soil Sample Recovery
- ◧ Continuous core 1.85" ID

Water Level
- ▽ Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: FCE
Approved by: ALC

Exploration Log AGP-02
Sheet 1 of 1

NEW STANDARD EXPLORATION LOG TEMPLATE \\ASP-BAI-01\PROJECTS\GINTW\PROJECTS\AS220138B MERCY HOUSING.GPJ June 3, 2025

Aspect CONSULTING	35th and Pacific - AS220138B		Environmental Exploration Log	
	Project Address & Site Specific Location 3551, 3561 Pacific Ave, Tacoma, WA, see Figure 2		*Coordinates (Lat,Lon WGS84)* 47.2274, -122.4336	*Exploration Number* **AGP-03**
Contractor Cascade Environmental	*Equipment* Geoprobe 7822DT	*Sampling Method* Percussion hammer	*Ground Surface Elev. (NAVD88)* 307'	Ecology Well Tag No. BQK 008
Operator Tim Watson	*Exploration Method(s)* Direct push	*Work Start/Completion Dates* 3/17/2025	*Top of Casing Elev. (NAVD88)* NA	*Depth to Water (Below GS)* No Water Encountered

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
0	305	8" Flush mount, traffic-rated monument in concrete 0.17" x 0.25" fluoropolymer tubing Granular bentonite chips 12/20 silica sand Stainless steel 6" vapor screen		AGP-03-2	PID=0.2 Sheen=none PID=0.8 Sheen=none		GRAVEL (GP); Base course **FILL** SILTY SAND WITH GRAVEL (SM); slightly moist, gray brown; fine to coarse sand; fine to coarse subrounded to subangular gravel. Becomes black.	0
5	300				PID=0.8 Sheen=none PID=0.6 Sheen=none PID=1.1 Sheen=none		Becomes brown. SAND WITH GRAVEL (SP); slightly moist, gray to brown; fine to coarse sand; fine to coarse subrounded to subangular gravel.	5
10	295			AGP-03-10 & ABP-101-10	PID=1.5 Sheen=none PID=1.1 Sheen=none		SILTY SAND WITH GRAVEL (SM); slightly moist, black to light brown; fine to coarse sand; fine to coarse subrounded to subangular gravel. SAND WITH GRAVEL (SP); slightly moist, gray brown to dark gray; fine to coarse sand; fine to coarse subrounded to subangular gravel.	10
15	290				PID=0.9 Sheen=none		Bottom of exploration at 15 ft. bgs. Note: CH4 levels were 0% at all depths.	15

Legend

Sample Type
- No Soil Sample Recovery
- Continuous core 1.85" ID

Water Level
- No Water Encountered

See Exploration Log Key for explanation of symbols

Logged by: FCE
Approved by: ALC

Exploration Log AGP-03
Sheet 1 of 1

NEW STANDARD EXPLORATION LOG TEMPLATE \\ASP-BAI-01\PROJECTS\GINTW\PROJECTS\AS220138B MERCY HOUSING.GPJ June 3, 2025

Aspect CONSULTING	35th and Pacific - AS220138B		Monitoring Well Log	
	Project Address & Site Specific Location 3551, 3561 Pacific Ave, Tacoma, WA, see Figure 2		*Coordinates (Lat,Lon WGS84)* 47.2270, -122.4328	*Exploration Number* **AMW-04**
Contractor Cascade Environmental	*Equipment* Terra Sonic 150CC	*Sampling Method* Grab; Autohammer	*Ground Surface Elev. (NAVD88)* 307'	Ecology Well Tag No. BNV 169
Operator Joe Staloch & Aaron Bradley	*Exploration Method(s)* Sonic	*Work Start/Completion Dates* 1/17/2025 to 1/21/2025	*Top of Casing Elev. (NAVD88)* NA	*Depth to Water (Below GS)* 60' (ATD) 88.52' (Static)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
		8-in flush mount monument set in concrete			PID=0.3 Sheen=none		TOPSOIL; roots, vegetation.	
							FILL	
	305			AMW-04-1.5			SILTY SAND WITH GRAVEL (SM); medium dense, very moist, brown; fine to coarse sand; fine to coarse subrounded to subangular gravel.	
		2-in, threaded schedule 40 PVC well casing			PID=0.3 Sheen=none			
				S-1	SPT=3,6,17 PID=0.7 Sheen=none			
					PID=0.8 Sheen=none			
5				S-2	SPT=11,20,22 PID=0.2 Sheen=none		Becomes gray. Becomes dense.	5
	300			AMW-04-7				
				S-3	SPT=7,10,13 PID=0.4 Sheen=none		Brick debris and wood.	
					PID=0.4 Sheen=none			
					PID=0.3 Sheen=none			
10		3/8-in hydrated bentonite chip seal, NSF 60			SPT=11,12,14			10
				S-4 AMW-04-11	PID=1.5 Sheen=none			
	295							
				S-5	SPT=2,4,9 PID=1.9 Sheen=none		Becomes medium dense.	
					PID=0.7 Sheen=none			
15				S-6	SPT=6,11,13 PID=1.1 Sheen=none			15
	290			AMW-04-17			Increased silt content. Becomes loose.	
				S-7	SPT=1,2,4 PID=1.4 Sheen=none			
					PID=0.9 Sheen=none			
20				S-8	SPT=3,6,13 PID=2.2 Sheen=none		Becomes medium dense.	20
	285				PID=2.3 Sheen=none		Reduced silt content.	
25				S-9	SPT=5,11,13 PID=2.3 Sheen=none			25
					PID=2.1 Sheen=none			
	280			AMW-04-27	PID=2.8 Sheen=none			
					PID=1.7 Sheen=none			
30				S-10	SPT=1,2,3		Becomes loose.	30
					PID=1.0 Sheen=none			
	275							
					PID=0.5 Sheen=none			

Legend

Sample Type
- No Soil Sample Recovery
- Continuous core 6" ID
- Grab sample
- Split Barrel 2" X 1.375" (SPT)

Water Level
- Static Water Level
- Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: FCE
Approved by: ECS

Exploration Log AMW-04

Sheet 1 of 3

NEW STANDARD EXPLORATION LOG TEMPLATE \\ASP-BAI-01\PROJECTS\GINTWPROJECTS\AS220138B MERCY HOUSING.GPJ June 3, 2025

Aspect CONSULTING	35th and Pacific - AS220138B		Monitoring Well Log	
	Project Address & Site Specific Location 3551, 3561 Pacific Ave, Tacoma, WA, see Figure 2		*Coordinates (Lat,Lon WGS84)* 47.2270, -122.4328	*Exploration Number* **AMW-04**
Contractor Cascade Environmental	*Equipment* Terra Sonic 150CC	*Sampling Method* Grab; Autohammer	*Ground Surface Elev. (NAVD88)* 307'	Ecology Well Tag No. BNV 169
Operator Joe Staloch & Aaron Bradley	*Exploration Method(s)* Sonic	*Work Start/Completion Dates* 1/17/2025 to 1/21/2025	*Top of Casing Elev. (NAVD88)* NA	*Depth to Water (Below GS)* 60' (ATD) 88.52' (Static)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
				S-11	SPT=3,5,7 PID=1.0 Sheen=none		**FILL** SILTY SAND WITH GRAVEL (SM); medium dense, very moist, brown; fine to coarse sand; fine to coarse subrounded to subangular gravel. (continued)	
	270			AMW-04-37	PID=1.6 Sheen=none		Becomes medium dense with increased silt content.	
40				S-12	SPT=10,6,8 PID=1.7 Sheen=none			40
	265				PID=3.2 Sheen=none			
					PID=2.1 Sheen=none			
45				S-13	SPT=50/6" PID=1.7 Sheen=none		Becomes dense to very dense.	45
	260				PID=2.6 Sheen=none		Becomes gray.	
				AMW-04-49	PID=3.0 Sheen=none			
50				S-14	SPT=38,40,50/6" PID=2.2 Sheen=none			50
	255				PID=2.4 Sheen=none		Becomes brown.	
55				S-15	SPT=50/6" PID=1.3 Sheen=none		Becomes gray; driller reports heaving at 55 feet.	55
	250			AMW-04-56.5	PID=2.7 Sheen=none			
					PID=2.5 Sheen=none			
60		▽ 1/20/2025		S-16	SPT=11,16,27 PID=0.7 Sheen=none		Becomes wet.	60
	245				PID=0.9 Sheen=none			
					PID=0.6 Sheen=none			
65				S-17	SPT=20,45,45		Becomes dark gray with increased silt content.	65
	240				PID=0.2 Sheen=none			
					PID=0.3 Sheen=none			

Legend

Sample Type
- ◯ No Soil Sample Recovery
- ▮▯ Continuous core 6" ID
- Grab sample
- Split Barrel 2" X 1.375" (SPT)

Water Level
- ▼ Static Water Level
- ▽ Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: FCE
Approved by: ECS

Exploration Log AMW-04

Sheet 2 of 3

NEW STANDARD EXPLORATION LOG TEMPLATE \\ASP-BAI-01\PROJECTS\GINTWPROJECTS\AS220138B MERCY HOUSING.GPJ June 3, 2025

Aspect CONSULTING	35th and Pacific - AS220138B		Monitoring Well Log	
	Project Address & Site Specific Location 3551, 3561 Pacific Ave, Tacoma, WA, see Figure 2		*Coordinates (Lat,Lon WGS84)* 47.2270, -122.4328	*Exploration Number* **AMW-04**
Contractor Cascade Environmental	*Equipment* Terra Sonic 150CC	*Sampling Method* Grab; Autohammer	*Ground Surface Elev. (NAVD88)* 307'	Ecology Well Tag No. BNV 169
Operator Joe Staloch & Aaron Bradley	*Exploration Method(s)* Sonic	*Work Start/Completion Dates* 1/17/2025 to 1/21/2025	*Top of Casing Elev. (NAVD88)* NA	*Depth to Water (Below GS)* 60' (ATD) 88.52' (Static)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
				AMW-04-70	SPT=4,4,5 PID=0.2 Sheen=none		**FILL** SILTY SAND WITH GRAVEL (SM); medium dense, very moist, brown; fine to coarse sand; fine to coarse subrounded to subangular gravel. (continued)	
				S-18	PID=0.4 Sheen=none		Becomes loose, wet.	
	235	12/20 silica sand filter pack			PID=0.1 Sheen=none			
75				S-19	SPT=32,50/6"		Becomes dense and moist; trace concrete debris.	75
	230				PID=0.8 Sheen=none			
					PID=0.9 Sheen=none			
80				S-20	SPT=14,14,20 PID=0.3 Sheen=none			80
	225	2-in, prepacked 0.010-in (10-slot) slotted schedule 40 PVC screen			PID=0.5 Sheen=none		**VASHON TILL** SILTY SAND (SM); medium dense, very moist to wet, brown; fine to medium sand; trace fine to coarse, subrounded to rounded gravel; iron-oxide staining from 83 to 85 feet.	
					PID=0.2 Sheen=none			
85				S-21	SPT=6,12,18 PID=0.0 Sheen=none			85
	220				PID=0.1 Sheen=none			
		1/22/2025					Reduced sand content.	
				AMW-04-89	PID=0.4 Sheen=none			
90				S-22	SPT=50/3" PID=0.3 Sheen=none		Becomes very dense; driller reports hard drilling at 90 feet.	90
	215			AMW-04-92 & AMW-103-89	PID=0.4 Sheen=none		Becomes gray	
					PID=0.3 Sheen=none			
95		Bottom plug		S-23	SPT=4,7,9		Blowcounts affected by heave.	95
	210						Bottom of exploration at 96.5 ft. bgs. Note: No sheen or odor observed throughout. CH4 levels were 0% at all depths.	
100								100
	205							

Legend

Sample Type
- No Soil Sample Recovery
- Continuous core 6" ID
- Grab sample
- Split Barrel 2" X 1.375" (SPT)

Water Level
- Static Water Level
- Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: FCE
Approved by: ECS

Exploration Log AMW-04

Sheen 3 of 3

NEW STANDARD EXPLORATION LOG TEMPLATE \\ASP-BAI-01\PROJECTS\GINTW\PROJECTS\AS220138B MERCY HOUSING.GPJ June 3, 2025

APPENDIX C

Investigation Derived Waste Manifest

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
None Required	1	(800) 397-7455	MERCY-IDW-4925-01

GENERATOR

5. Generator's Name and Mailing Address: Mercy Housing 35P, 3561 Pacific Ave, Tacoma, WA 98418, Attn:
Generator's Site Address (if different than mailing address):
Generator's Phone:

6. Transporter 1 Company Name: DH Environmental, Inc. — U.S. EPA ID Number: WAH000047217

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: Republic Services of America, 5400 W Marginal Way SW, Seattle, WA 98106 — U.S. EPA ID Number: N/A
Facility's Phone: (206) 933-5618

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Material Not Regulated by DOT (non-regulated IDW soil)	05	DM	3500	P	
2.	Material Not Regulated by Dot (non-regulated IDW water)	01	DM	400	P	
3.						
4.						

13. Special Handling Instructions and Additional Information
1) DH-ASPCT-MERCY-IDW- SOIL
2) DH-ASPCT-MERCY-IDW-WATER

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Jacob Brice (on behalf of Mercy Housing 35P) — Signature — Month: 4 — Day: 9 — Year: 25

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Jacob Brice — Signature — Month: 4 — Day: 9 — Year: 25

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Steve Calderon — Signature — Month: 4 — Day: 9 — Year: 25

APPENDIX D

Data Quality Review (DQR) and Laboratory Reports

January 20, 2025

Michael Erdahl
Friedman & Bruya
5500 4th Ave S.
Seattle, WA 98108-2419

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 2500768.00

Client Project: 501058
Location: N-A

Dear Mr. Erdahl,

Enclosed please find test results for the 2 sample(s) submitted to our laboratory for analysis on 1/15/2025.

Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with **U. S. EPA 40 CFR Appendix E to Subpart E of Part 763**, Interim Method for the Determination of Asbestos in Bulk Insulation Samples and **EPA 600/R-93/116**, Method for the Determination of Asbestos in Bulk Building Materials.

For samples containing more than one separable layer of materials, the report will include findings for each layer (labeled Layer 1 and Layer 2, etc. for each individual layer). The asbestos concentration in the sample is determined by calibrated visual estimation.

For those samples with asbestos concentrations between 1 and 10 percent based on visual estimation, the EPA recommends a procedure known as point counting (NESHAPS, 40 CFR Part 61). Point counting is a statistically more accurate means of quantification for samples with low concentrations of asbestos.

The detection limit for the calibrated visual estimation is <1%, 400 point counts is 0.25% and 1000 point counts is 0.1%

Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. Please do not hesitate to call if there is anything further we can assist you with.

Sincerely,

Hilary Crumley, Manager Asbestos Laboratory

NVLAP Testing
Lab Code: 102063-0

Enc.: Sample Results

Phone: 206 547.0100 | Fax: 206 634.1936 | Toll Free: 1.888.NVL.LABS (685.5227)
4708 Aurora Avenue North | Seattle, WA 98103-6516

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Friedman & Bruya
Address: 5500 4th Ave S.
Seattle, WA 98108-2419

Attention: Mr. Michael Erdahl
Project Location: N-A

Batch #: 2500768.00
Client Project #: 501058
Date Received: 1/15/2025
Samples Received: 2
Samples Analyzed: 2
Method: EPA/600/R-93/116

Lab ID: 250005252 **Client Sample #: AB-08-4.5**

Location: N-A

Comments: Qualitative analysis was conducted for the presence of asbestos fibers in this sample.

Layer 1 of 1 **Description:** Loose brown material with debris

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Mineral grains, Granules, Organic debris	Cellulose	**None Detected ND**
Wood flakes, Asphaltic Particles, Glass debris		

Lab ID: 250005253 **Client Sample #: AB-08-9**

Location: N-A

Comments: Qualitative analysis was conducted for the presence of asbestos fibers in this sample.

Layer 1 of 1 **Description:** Loose brown material with debris

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Soot and Char, Granules, Organic debris	Cellulose	**None Detected ND**
Mineral grains, Wood flakes		

Sampled by: Client
Analyzed by: Michelle Seidl **Date:** 01/17/2025
Reviewed by: Hilary Crumley **Date:** 01/20/2025

Hilary Crumley, Manager Asbestos Laboratory

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and EPA 40 CFR Appendix E to Subpart E of Part 763 with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

ASB-02

ASBESTOS LABORATORY SERVICES

Company	Friedman & Bruya	**NVL Batch Number**	**2500768.00**
Address	5500 4th Ave S. Seattle, WA 98108-2419	**TAT**	5 Days **AH** No
		Rush TAT	
Project Manager	Mr. Michael Erdahl	**Due Date**	1/22/2025 **Time** 1:30 PM
Phone	(206) 285-8282	**Email**	merdahl@friedmanandbruya.com
		Fax	(206) 283-5044

Project Name/Number: 501058 **Project Location:** N-A

Subcategory PLM Bulk

Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 2 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	250005252	AB-08-4.5		A
2	250005253	AB-08-9		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Courier				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Kelly AuVu		NVL	1/15/25	1330
Analyzed by	Michelle Seidl		NVL	1/17/25	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions: Samples were dried prior to analysis.

Date: 1/15/2025
Time: 3:22 PM
Entered By: Fatima Khan

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

2500768

Page # 1 of 1

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
NVL

PROJECT NAME/NO.	PO #
501058	F-20

REMARKS

AspectEDD

TURNAROUND TIME

☒ Standard
RUSH
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: Asbestos										Notes
AB-08-4.5		1/6/2025	13:10	soil	1	x										
AB-08-9		1/6/2025	13:45	soil	1	x										

page 4 of 4

Friedman & Bruya, Inc.
5500 4th Ave S
Seattle, WA 98115
Ph. (206) 285-8282

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Mac Goldman	Friedman and Bruya	1/15/25	9:35
Received by:	Kelly Arlin	Kelly Arlin	NVL	1-15-25	1330 Calm
Relinquished by:					

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

January 21, 2025

Ali Cochrane, Project Manager
Aspect Consulting
710 2nd Ave S, Suite 550
Seattle, WA 98104

Dear Ms Cochrane:

Included are the results from the testing of material submitted on January 7, 2025 from the Mercy Housing AS220138B, F&BI 501058 project. There are 31 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: Aspect Data, Hannah Cohen
ASP0121R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 7, 2025 by Friedman & Bruya, Inc. from the Aspect Consulting Mercy Housing AS220138B, F&BI 501058 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Aspect Consulting
501058 -01	AB-08-2.5
501058 -02	AB-08-4.5
501058 -03	AB-08-6
501058 -04	AB-08-9
501058 -05	AB-08-12
501058 -06	AB-08-13.5
501058 -07	AB-08-17
501058 -08	AB-08-19.5
501058 -09	AB-08-23
501058 -10	AB-08-25

Samples AB-08-4.5 and AB-08-9 were sent to NVL for asbestos testing. The report will be forwarded upon receipt.

The 8260D chloroethane and bromomethane calibration standard did not meet the acceptance criteria. The data were flagged accordingly.

The 8270E calibration standard did not meet the acceptance criteria for several compounds. The data were flagged accordingly.

An 8270E internal standard did not meet the acceptance criteria for sample AB-08-6. The sample was diluted and reanalyzed with acceptable results. Both data sets were reported.

All other quality control requirements were acceptable.

Date of Report: 01/21/25
Date Received: 01/07/25
Project: Mercy Housing AS220138B, F&BI 501058
Date Extracted: 01/16/25
Date Analyzed: 01/16/25

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)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
AB-08-2.5 501058-01	<5	119
AB-08-6 501058-03	<5	116
AB-08-12 501058-05	<5	116
AB-08-17 501058-07	<5	116
AB-08-25 501058-10	<5	110
Method Blank 05-049 MB	<5	114

Date of Report: 01/21/25
Date Received: 01/07/25
Project: Mercy Housing AS220138B, F&BI 501058
Date Extracted: 01/20/25
Date Analyzed: 01/20/25

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)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
AB-08-2.5 501058-01	<50	<250	113
AB-08-6 501058-03	79 x	1,100	111
AB-08-12 501058-05	<50	370	112
AB-08-17 501058-07	<50	720	111
AB-08-25 501058-10	<50	<250	109
Method Blank 05-209 MB	<50	<250	120

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-08-2.5	Client:	Aspect Consulting
Date Received:	01/07/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501058-01 1/0.5
Date Analyzed:	01/16/25	Data File:	011636.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	84	120
Toluene-d8	100	73	128
4-Bromofluorobenzene	95	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5 ca	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.0054	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-08-6	Client:	Aspect Consulting
Date Received:	01/07/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501058-03 1/0.5
Date Analyzed:	01/16/25	Data File:	011637.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	84	120
Toluene-d8	99	73	128
4-Bromofluorobenzene	97	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5 ca	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-08-12	Client:	Aspect Consulting
Date Received:	01/07/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501058-05 1/0.5
Date Analyzed:	01/16/25	Data File:	011638.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	84	120
Toluene-d8	103	73	128
4-Bromofluorobenzene	103	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5 ca	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	0.0082
Hexane	<0.25	o-Xylene	0.0032
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	0.0053	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.015	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-08-17	Client:	Aspect Consulting
Date Received:	01/07/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501058-07 1/0.5
Date Analyzed:	01/16/25	Data File:	011639.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	84	120
Toluene-d8	100	73	128
4-Bromofluorobenzene	100	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5 ca	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	0.061
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	0.27
Hexane	<0.25	o-Xylene	0.17
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	0.064
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	0.13
Benzene	0.047	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.058	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-08-25	Client:	Aspect Consulting
Date Received:	01/07/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501058-10 1/0.5
Date Analyzed:	01/16/25	Data File:	011640.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	84	120
Toluene-d8	101	73	128
4-Bromofluorobenzene	100	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5 ca	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	Method Blank	Client:	Aspect Consulting
Date Received:	Not Applicable	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	05-0156 mb 1/0.5
Date Analyzed:	01/16/25	Data File:	011623.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	84	120
Toluene-d8	100	73	128
4-Bromofluorobenzene	98	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5 ca	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-08-2.5	Client:	Aspect Consulting
Date Received:	01/07/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/20/25	Lab ID:	501058-01 1/25
Date Analyzed:	01/20/25	Data File:	012009.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	76 d	22	119
Phenol-d6	83 d	38	124
Nitrobenzene-d5	77 d	10	198
2-Fluorobiphenyl	85 d	45	117
2,4,6-Tribromophenol	70 d	11	158
Terphenyl-d14	81 d	50	124

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<2.5	Acenaphthylene	<0.012
Phenol	<1.2	2,6-Dinitrotoluene	<1.2
Bis(2-chloroethyl) ether	<0.25	3-Nitroaniline	<25
2-Chlorophenol	<2.5	Acenaphthene	<0.012
1,3-Dichlorobenzene	<0.25	2,4-Dinitrophenol	<7.5
1,4-Dichlorobenzene	<0.25	Dibenzofuran	<0.012
1,2-Dichlorobenzene	<0.25	2,4-Dinitrotoluene	<1.2
Benzyl alcohol	<2.5	4-Nitrophenol	<7.5
2,2'-Oxybis(1-chloropropane)	<0.25	Diethyl phthalate	<2.5
2-Methylphenol	<2.5	Fluorene	<0.012
Hexachloroethane	<0.25	4-Chlorophenyl phenyl ether	<0.25
N-Nitroso-di-n-propylamine	<0.25	N-Nitrosodiphenylamine	<0.25
3-Methylphenol + 4-Methylphenol	<5	4-Nitroaniline	<25
Nitrobenzene	<0.25	4,6-Dinitro-2-methylphenol	<7.5
Isophorone	<0.25	Hexachlorobenzene	<0.25
2-Nitrophenol	<2.5	Pentachlorophenol	<1.2
2,4-Dimethylphenol	<2.5	Phenanthrene	<0.012
Benzoic acid	<12	Anthracene	<0.012
Bis(2-chloroethoxy)methane	<0.25	Carbazole	<0.012
2,4-Dichlorophenol	<2.5	Di-n-butyl phthalate	<2.5
1,2,4-Trichlorobenzene	<0.25	Fluoranthene	<0.012
Naphthalene	<0.025	Pyrene	<0.012
Hexachlorobutadiene	<0.25	Benzyl butyl phthalate	<2.5
4-Chloroaniline	<25	Benz(a)anthracene	<0.025
4-Chloro-3-methylphenol	<2.5	Chrysene	<0.012
2-Methylnaphthalene	<0.012	Bis(2-ethylhexyl) phthalate	<4
1-Methylnaphthalene	<0.012	Di-n-octyl phthalate	<2.5
Hexachlorocyclopentadiene	<0.75 ca	Benzo(a)pyrene	<0.012
2,4,6-Trichlorophenol	<2.5	Benzo(b)fluoranthene	<0.012
2,4,5-Trichlorophenol	<2.5	Benzo(k)fluoranthene	<0.012
2-Chloronaphthalene	<0.25	Indeno(1,2,3-cd)pyrene	<0.025
2-Nitroaniline	<1.2	Dibenz(a,h)anthracene	<0.025
Dimethyl phthalate	<2.5	Benzo(g,h,i)perylene	<0.025

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-08-6	Client:	Aspect Consulting
Date Received:	01/07/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/20/25	Lab ID:	501058-03 1/50
Date Analyzed:	01/21/25	Data File:	012109.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	60 d	14	115
Phenol-d6	77 d	29	121
Nitrobenzene-d5	63 d	16	137
2-Fluorobiphenyl	81 d	46	122
2,4,6-Tribromophenol	73 d	17	154
Terphenyl-d14	85 d	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<5	Acenaphthylene	<0.025
Phenol	<2.5	2,6-Dinitrotoluene	<2.5
Bis(2-chloroethyl) ether	<0.5	3-Nitroaniline	<50
2-Chlorophenol	<5	Acenaphthene	<0.025
1,3-Dichlorobenzene	<0.5	2,4-Dinitrophenol	<15
1,4-Dichlorobenzene	<0.5	Dibenzofuran	<0.025
1,2-Dichlorobenzene	<0.5	2,4-Dinitrotoluene	<2.5
Benzyl alcohol	<5	4-Nitrophenol	<15
2,2'-Oxybis(1-chloropropane)	<0.5	Diethyl phthalate	<5
2-Methylphenol	<5	Fluorene	<0.025
Hexachloroethane	<0.5	4-Chlorophenyl phenyl ether	<0.5
N-Nitroso-di-n-propylamine	<0.5	N-Nitrosodiphenylamine	<0.5
3-Methylphenol + 4-Methylphenol	<10	4-Nitroaniline	<50
Nitrobenzene	<0.5	4,6-Dinitro-2-methylphenol	<15 ca
Isophorone	<0.5	Hexachlorobenzene	<0.5
2-Nitrophenol	<5	Pentachlorophenol	<2.5
2,4-Dimethylphenol	<5	Phenanthrene	0.033
Benzoic acid	<25 ca	Anthracene	<0.025
Bis(2-chloroethoxy)methane	<0.5	Carbazole	<0.025
2,4-Dichlorophenol	<5	Di-n-butyl phthalate	<5
1,2,4-Trichlorobenzene	<0.5	Fluoranthene	0.087
Naphthalene	<0.05	Pyrene	0.088
Hexachlorobutadiene	<0.5	Benzyl butyl phthalate	<5
4-Chloroaniline	<50	Benz(a)anthracene	0.052
4-Chloro-3-methylphenol	<5	Chrysene	0.13
2-Methylnaphthalene	<0.025	Bis(2-ethylhexyl) phthalate	<8
1-Methylnaphthalene	<0.025	Di-n-octyl phthalate	<5 J
Hexachlorocyclopentadiene	<1.5	Benzo(a)pyrene	0.078 J
2,4,6-Trichlorophenol	<5	Benzo(b)fluoranthene	0.12 J
2,4,5-Trichlorophenol	<5	Benzo(k)fluoranthene	0.037 J
2-Chloronaphthalene	<0.5	Indeno(1,2,3-cd)pyrene	<0.05 J
2-Nitroaniline	<2.5	Dibenz(a,h)anthracene	<0.05 J
Dimethyl phthalate	<5	Benzo(g,h,i)perylene	<0.05 J

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-08-6	Client:	Aspect Consulting
Date Received:	01/07/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/20/25	Lab ID:	501058-03 1/250
Date Analyzed:	01/20/25	Data File:	012011.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	64 d	22	119
Phenol-d6	67 d	38	124
Nitrobenzene-d5	65 d	10	198
2-Fluorobiphenyl	80 d	45	117
2,4,6-Tribromophenol	134 d	11	158
Terphenyl-d14	90 d	50	124

Compounds:	Concentration mg/kg (ppm)
Di-n-octyl phthalate	<25
Benzo(a)pyrene	<0.12
Benzo(b)fluoranthene	<0.12
Benzo(k)fluoranthene	<0.12
Indeno(1,2,3-cd)pyrene	<0.25
Dibenz(a,h)anthracene	<0.25
Benzo(g,h,i)perylene	<0.25

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-08-12	Client:	Aspect Consulting
Date Received:	01/07/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/20/25	Lab ID:	501058-05 1/25
Date Analyzed:	01/20/25	Data File:	012010.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	61 d	22	119
Phenol-d6	72 d	38	124
Nitrobenzene-d5	64 d	10	198
2-Fluorobiphenyl	75 d	45	117
2,4,6-Tribromophenol	82 d	11	158
Terphenyl-d14	93 d	50	124

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<2.5	Acenaphthylene	<0.012
Phenol	<1.2	2,6-Dinitrotoluene	<1.2
Bis(2-chloroethyl) ether	<0.25	3-Nitroaniline	<25
2-Chlorophenol	<2.5	Acenaphthene	<0.012
1,3-Dichlorobenzene	<0.25	2,4-Dinitrophenol	<7.5
1,4-Dichlorobenzene	<0.25	Dibenzofuran	<0.012
1,2-Dichlorobenzene	<0.25	2,4-Dinitrotoluene	<1.2
Benzyl alcohol	<2.5	4-Nitrophenol	<7.5
2,2'-Oxybis(1-chloropropane)	<0.25	Diethyl phthalate	<2.5
2-Methylphenol	<2.5	Fluorene	<0.012
Hexachloroethane	<0.25	4-Chlorophenyl phenyl ether	<0.25
N-Nitroso-di-n-propylamine	<0.25	N-Nitrosodiphenylamine	<0.25
3-Methylphenol + 4-Methylphenol	<5	4-Nitroaniline	<25
Nitrobenzene	<0.25	4,6-Dinitro-2-methylphenol	<7.5
Isophorone	<0.25	Hexachlorobenzene	<0.25
2-Nitrophenol	<2.5	Pentachlorophenol	<1.2
2,4-Dimethylphenol	<2.5	Phenanthrene	0.039
Benzoic acid	<12	Anthracene	<0.012
Bis(2-chloroethoxy)methane	<0.25	Carbazole	<0.012
2,4-Dichlorophenol	<2.5	Di-n-butyl phthalate	<2.5
1,2,4-Trichlorobenzene	<0.25	Fluoranthene	0.038
Naphthalene	<0.025	Pyrene	0.044
Hexachlorobutadiene	<0.25	Benzyl butyl phthalate	<2.5
4-Chloroaniline	<25	Benz(a)anthracene	<0.025
4-Chloro-3-methylphenol	<2.5	Chrysene	0.033
2-Methylnaphthalene	<0.012	Bis(2-ethylhexyl) phthalate	<4
1-Methylnaphthalene	<0.012	Di-n-octyl phthalate	<2.5
Hexachlorocyclopentadiene	<0.75 ca	Benzo(a)pyrene	0.020
2,4,6-Trichlorophenol	<2.5	Benzo(b)fluoranthene	0.025
2,4,5-Trichlorophenol	<2.5	Benzo(k)fluoranthene	<0.012
2-Chloronaphthalene	<0.25	Indeno(1,2,3-cd)pyrene	<0.025
2-Nitroaniline	<1.2	Dibenz(a,h)anthracene	<0.025
Dimethyl phthalate	<2.5	Benzo(g,h,i)perylene	<0.025

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-08-17	Client:	Aspect Consulting
Date Received:	01/07/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/20/25	Lab ID:	501058-07 1/50
Date Analyzed:	01/21/25	Data File:	012108.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	54 d	14	115
Phenol-d6	73 d	29	121
Nitrobenzene-d5	60 d	16	137
2-Fluorobiphenyl	86 d	46	122
2,4,6-Tribromophenol	58 d	17	154
Terphenyl-d14	92 d	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<5	Acenaphthylene	<0.025
Phenol	<2.5	2,6-Dinitrotoluene	<2.5
Bis(2-chloroethyl) ether	<0.5	3-Nitroaniline	<50
2-Chlorophenol	<5	Acenaphthene	<0.025
1,3-Dichlorobenzene	<0.5	2,4-Dinitrophenol	<15
1,4-Dichlorobenzene	<0.5	Dibenzofuran	<0.025
1,2-Dichlorobenzene	<0.5	2,4-Dinitrotoluene	<2.5
Benzyl alcohol	<5	4-Nitrophenol	<15
2,2'-Oxybis(1-chloropropane)	<0.5	Diethyl phthalate	<5
2-Methylphenol	<5	Fluorene	<0.025
Hexachloroethane	<0.5	4-Chlorophenyl phenyl ether	<0.5
N-Nitroso-di-n-propylamine	<0.5	N-Nitrosodiphenylamine	<0.5
3-Methylphenol + 4-Methylphenol	<10	4-Nitroaniline	<50
Nitrobenzene	<0.5	4,6-Dinitro-2-methylphenol	<15 ca
Isophorone	<0.5	Hexachlorobenzene	<0.5
2-Nitrophenol	<5	Pentachlorophenol	<2.5
2,4-Dimethylphenol	<5	Phenanthrene	<0.025
Benzoic acid	<25 ca	Anthracene	<0.025
Bis(2-chloroethoxy)methane	<0.5	Carbazole	<0.025
2,4-Dichlorophenol	<5	Di-n-butyl phthalate	<5
1,2,4-Trichlorobenzene	<0.5	Fluoranthene	<0.025
Naphthalene	<0.05	Pyrene	<0.025
Hexachlorobutadiene	<0.5	Benzyl butyl phthalate	<5
4-Chloroaniline	<50	Benz(a)anthracene	<0.05
4-Chloro-3-methylphenol	<5	Chrysene	0.033
2-Methylnaphthalene	<0.025	Bis(2-ethylhexyl) phthalate	<8
1-Methylnaphthalene	<0.025	Di-n-octyl phthalate	<5
Hexachlorocyclopentadiene	<1.5	Benzo(a)pyrene	<0.025
2,4,6-Trichlorophenol	<5	Benzo(b)fluoranthene	<0.025
2,4,5-Trichlorophenol	<5	Benzo(k)fluoranthene	<0.025
2-Chloronaphthalene	<0.5	Indeno(1,2,3-cd)pyrene	<0.05
2-Nitroaniline	<2.5	Dibenz(a,h)anthracene	<0.05
Dimethyl phthalate	<5	Benzo(g,h,i)perylene	<0.05

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-08-25	Client:	Aspect Consulting
Date Received:	01/07/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/20/25	Lab ID:	501058-10 1/5
Date Analyzed:	01/20/25	Data File:	012008.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	73	22	119
Phenol-d6	79	38	124
Nitrobenzene-d5	80	10	198
2-Fluorobiphenyl	83	45	117
2,4,6-Tribromophenol	75	11	158
Terphenyl-d14	86	50	124

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15 ca	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	Aspect Consulting
Date Received:	Not Applicable	Project:	Mercy Housing AS220138B
Date Extracted:	01/20/25	Lab ID:	05-0211 mb 1/5
Date Analyzed:	01/20/25	Data File:	012006.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	83	22	119
Phenol-d6	91	38	124
Nitrobenzene-d5	92	10	198
2-Fluorobiphenyl	94	45	117
2,4,6-Tribromophenol	79	11	158
Terphenyl-d14	101	50	124

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	0.0030
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15 ca	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-08-2.5	Client:	Aspect Consulting
Date Received:	01/07/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501058-01
Date Analyzed:	01/15/25	Data File:	501058-01.154
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.4
Barium	72
Cadmium	<1
Chromium	18
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-08-2.5	Client:	Aspect Consulting
Date Received:	01/07/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501058-01 x5
Date Analyzed:	01/15/25	Data File:	501058-01 x5.151
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Lead	45

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-08-6	Client:	Aspect Consulting
Date Received:	01/07/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501058-03
Date Analyzed:	01/16/25	Data File:	501058-03.039
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	7.8
Barium	64
Cadmium	<1
Chromium	17
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-08-6	Client:	Aspect Consulting
Date Received:	01/07/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501058-03 x5
Date Analyzed:	01/16/25	Data File:	501058-03 x5.091
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Lead	92

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-08-12	Client:	Aspect Consulting
Date Received:	01/07/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501058-05
Date Analyzed:	01/16/25	Data File:	501058-05.040
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.3
Barium	58
Cadmium	<1
Chromium	22
Lead	15
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-08-17	Client:	Aspect Consulting
Date Received:	01/07/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501058-07
Date Analyzed:	01/16/25	Data File:	501058-07.041
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.9
Barium	33
Cadmium	<1
Chromium	11
Lead	6.5
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-08-25	Client:	Aspect Consulting
Date Received:	01/07/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501058-10
Date Analyzed:	01/16/25	Data File:	501058-10.042
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.2
Barium	57
Cadmium	<1
Chromium	23
Lead	3.6
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Aspect Consulting
Date Received:	NA	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	I5-36 mb
Date Analyzed:	01/15/25	Data File:	I5-36 mb.149
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Date of Report: 01/21/25
Date Received: 01/07/25
Project: Mercy Housing AS220138B, F&BI 501058

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TPH AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code: 501058-01 (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)	40	80	70-130

Date of Report: 01/21/25
Date Received: 01/07/25
Project: Mercy Housing AS220138B, F&BI 501058

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 501058-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	130	113	109	64-136	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	112	78-121

Date of Report: 01/21/25
Date Received: 01/07/25
Project: Mercy Housing AS220138B, F&BI 501058

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 501203-04 (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	<0.5	33	32	10-47	3
Chloromethane	mg/kg (ppm)	2	<0.5	55	52	10-88	6
Vinyl chloride	mg/kg (ppm)	2	<0.05	61	57	10-79	7
Bromomethane	mg/kg (ppm)	2	<0.5	46	45	10-85	2
Chloroethane	mg/kg (ppm)	2	<0.5	51	49	11-106	4
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	64	53	10-85	19
Acetone	mg/kg (ppm)	10	<5	66	62	10-224	6
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	75	69	11-105	8
Hexane	mg/kg (ppm)	2	<0.25	67	60	10-106	11
Methylene chloride	mg/kg (ppm)	2	<0.5	67	63	10-139	6
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	81	76	18-131	6
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	80	75	16-122	6
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	75	70	19-125	7
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	74	68	10-184	8
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	79	74	18-129	7
Chloroform	mg/kg (ppm)	2	<0.05	73	69	18-126	6
2-Butanone (MEK)	mg/kg (ppm)	10	<1	69	65	10-190	6
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	69	65	19-138	6
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	74	69	16-126	7
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	81	73	19-129	10
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	73	69	13-125	6
Benzene	mg/kg (ppm)	2	<0.03	82	76	15-129	8
Trichloroethene	mg/kg (ppm)	2	<0.02	83	79	14-127	5
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	81	74	17-137	9
Bromodichloromethane	mg/kg (ppm)	2	<0.05	76	72	24-130	5
Dibromomethane	mg/kg (ppm)	2	<0.05	79	75	20-138	5
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	84	81	21-139	4
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	82	75	17-135	9
Toluene	mg/kg (ppm)	2	<0.05	86	81	15-129	6
trans-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	80	77	18-130	4
1,1,2-Trichloroethane	mg/kg (ppm)	2	<0.05	81	77	29-128	5
2-Hexanone	mg/kg (ppm)	10	<1	67	69	28-142	3
1,3-Dichloropropane	mg/kg (ppm)	2	<0.05	80	77	20-135	4
Tetrachloroethene	mg/kg (ppm)	2	<0.025	83	78	20-121	6
Dibromochloromethane	mg/kg (ppm)	2	<0.05	79	77	11-138	3
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	80	77	21-130	4
Chlorobenzene	mg/kg (ppm)	2	<0.05	82	78	19-129	5
Ethylbenzene	mg/kg (ppm)	2	<0.05	83	79	23-133	5
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	81	75	16-127	8
m,p-Xylene	mg/kg (ppm)	4	<0.1	84	79	19-134	6
o-Xylene	mg/kg (ppm)	2	<0.05	84	80	20-132	5
Styrene	mg/kg (ppm)	2	<0.05	87	84	23-127	4
Isopropylbenzene	mg/kg (ppm)	2	<0.05	94	89	21-134	5
Bromoform	mg/kg (ppm)	2	<0.05	78	77	10-142	1
n-Propylbenzene	mg/kg (ppm)	2	<0.05	84	80	10-141	5
Bromobenzene	mg/kg (ppm)	2	<0.05	84	79	10-135	6
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	84	79	20-136	6
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	80	74	10-234	8
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	75	71	10-144	5
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	83	78	10-139	6
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	82	77	10-139	6
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	84	79	10-144	6
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	0.042	86	80	24-133	7
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	86	81	23-134	6
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	87	83	25-131	5
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	86	78	10-143	10
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	85	78	10-146	9
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	86	79	10-144	8
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	74	70	10-163	6
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	89	81	10-147	9
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	89	80	10-162	11
Naphthalene	mg/kg (ppm)	2	<0.05	91	82	30-138	10
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	88	80	10-173	10

Date of Report: 01/21/25
Date Received: 01/07/25
Project: Mercy Housing AS220138B, F&BI 501058

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2	59	10-93
Chloromethane	mg/kg (ppm)	2	75	34-101
Vinyl chloride	mg/kg (ppm)	2	73	47-106
Bromomethane	mg/kg (ppm)	2	56	38-123
Chloroethane	mg/kg (ppm)	2	55	44-123
Trichlorofluoromethane	mg/kg (ppm)	2	80	56-108
Acetone	mg/kg (ppm)	10	85	24-185
1,1-Dichloroethene	mg/kg (ppm)	2	99	61-118
Hexane	mg/kg (ppm)	2	89	54-142
Methylene chloride	mg/kg (ppm)	2	91	10-213
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	86	70-130
trans-1,2-Dichloroethene	mg/kg (ppm)	2	98	70-130
1,1-Dichloroethane	mg/kg (ppm)	2	89	70-130
2,2-Dichloropropane	mg/kg (ppm)	2	87	45-172
cis-1,2-Dichloroethene	mg/kg (ppm)	2	91	70-130
Chloroform	mg/kg (ppm)	2	85	70-130
2-Butanone (MEK)	mg/kg (ppm)	10	84	36-182
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	81	66-140
1,1,1-Trichloroethane	mg/kg (ppm)	2	88	70-130
1,1-Dichloropropene	mg/kg (ppm)	2	94	70-130
Carbon tetrachloride	mg/kg (ppm)	2	90	68-146
Benzene	mg/kg (ppm)	2	95	70-130
Trichloroethene	mg/kg (ppm)	2	98	53-133
1,2-Dichloropropane	mg/kg (ppm)	2	94	67-137
Bromodichloromethane	mg/kg (ppm)	2	88	70-130
Dibromomethane	mg/kg (ppm)	2	92	70-130
4-Methyl-2-pentanone	mg/kg (ppm)	10	94	70-130
cis-1,3-Dichloropropene	mg/kg (ppm)	2	94	70-130
Toluene	mg/kg (ppm)	2	99	63-127
trans-1,3-Dichloropropene	mg/kg (ppm)	2	93	70-130
1,1,2-Trichloroethane	mg/kg (ppm)	2	92	70-130
2-Hexanone	mg/kg (ppm)	10	86	65-148
1,3-Dichloropropane	mg/kg (ppm)	2	90	67-135
Tetrachloroethene	mg/kg (ppm)	2	100	59-138
Dibromochloromethane	mg/kg (ppm)	2	92	61-154
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	92	70-130
Chlorobenzene	mg/kg (ppm)	2	98	65-133
Ethylbenzene	mg/kg (ppm)	2	97	60-140
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	91	68-129
m,p-Xylene	mg/kg (ppm)	4	99	56-145
o-Xylene	mg/kg (ppm)	2	97	61-137
Styrene	mg/kg (ppm)	2	101	61-138
Isopropylbenzene	mg/kg (ppm)	2	108	52-148
Bromoform	mg/kg (ppm)	2	89	57-166
n-Propylbenzene	mg/kg (ppm)	2	98	36-162
Bromobenzene	mg/kg (ppm)	2	96	63-127
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	97	43-156
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	89	35-184
1,2,3-Trichloropropane	mg/kg (ppm)	2	83	70-130
2-Chlorotoluene	mg/kg (ppm)	2	93	50-146
4-Chlorotoluene	mg/kg (ppm)	2	94	47-150
tert-Butylbenzene	mg/kg (ppm)	2	95	41-154
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	98	42-159
sec-Butylbenzene	mg/kg (ppm)	2	98	25-175
p-Isopropyltoluene	mg/kg (ppm)	2	99	18-186
1,3-Dichlorobenzene	mg/kg (ppm)	2	97	49-149
1,4-Dichlorobenzene	mg/kg (ppm)	2	96	48-149
1,2-Dichlorobenzene	mg/kg (ppm)	2	97	58-139
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	85	70-130
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	98	39-166
Hexachlorobutadiene	mg/kg (ppm)	2	98	41-186
Naphthalene	mg/kg (ppm)	2	98	67-143
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	99	49-165

Date of Report: 01/21/25
Date Received: 01/07/25
Project: Mercy Housing AS220138B, F&BI 501058

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270E

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Pyridine	mg/kg (ppm)	0.83	76	79	14-103	4
Phenol	mg/kg (ppm)	0.83	106	107	57-113	1
Bis(2-chloroethyl) ether	mg/kg (ppm)	0.83	88	90	55-108	2
2-Chlorophenol	mg/kg (ppm)	0.83	91	95	60-104	4
1,3-Dichlorobenzene	mg/kg (ppm)	0.83	94	95	54-103	1
1,4-Dichlorobenzene	mg/kg (ppm)	0.83	93	94	54-102	1
1,2-Dichlorobenzene	mg/kg (ppm)	0.83	94	94	55-103	0
Benzyl alcohol	mg/kg (ppm)	4.2	86	85	36-147	1
2,2'-Oxybis(1-chloropropane)	mg/kg (ppm)	0.83	94	94	56-109	0
2-Methylphenol	mg/kg (ppm)	0.83	95	97	62-107	2
Hexachloroethane	mg/kg (ppm)	0.83	91	93	54-105	2
N-Nitroso-di-n-propylamine	mg/kg (ppm)	0.83	98	102	64-112	4
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	0.83	96	99	63-110	3
Nitrobenzene	mg/kg (ppm)	0.83	90	93	55-111	3
Isophorone	mg/kg (ppm)	0.83	102	106	52-127	4
2-Nitrophenol	mg/kg (ppm)	0.83	85	92	53-122	8
2,4-Dimethylphenol	mg/kg (ppm)	0.83	95	98	31-105	3
Benzoic acid	mg/kg (ppm)	2.5	59	70	38-99	17
Bis(2-chloroethoxy)methane	mg/kg (ppm)	0.83	98	99	63-112	1
2,4-Dichlorophenol	mg/kg (ppm)	0.83	97	100	62-112	3
1,2,4-Trichlorobenzene	mg/kg (ppm)	0.83	96	98	59-105	2
Naphthalene	mg/kg (ppm)	0.83	87	88	59-105	1
Hexachlorobutadiene	mg/kg (ppm)	0.83	86	86	54-108	0
4-Chloroaniline	mg/kg (ppm)	6.8	72	73	36-111	1
4-Chloro-3-methylphenol	mg/kg (ppm)	0.83	96	101	63-116	5
2-Methylnaphthalene	mg/kg (ppm)	0.83	91	91	62-108	0
1-Methylnaphthalene	mg/kg (ppm)	0.83	91	92	62-108	1
Hexachlorocyclopentadiene	mg/kg (ppm)	0.83	67	79	48-123	16
2,4,6-Trichlorophenol	mg/kg (ppm)	0.83	98	106	61-114	8
2,4,5-Trichlorophenol	mg/kg (ppm)	0.83	99	105	64-121	6
2-Chloronaphthalene	mg/kg (ppm)	0.83	86	89	62-112	3
2-Nitroaniline	mg/kg (ppm)	4.2	79	81	30-179	2
Dimethyl phthalate	mg/kg (ppm)	0.83	100	109	63-124	9
Acenaphthylene	mg/kg (ppm)	0.83	96	98	61-111	2
2,6-Dinitrotoluene	mg/kg (ppm)	0.83	107	113	63-131	5
3-Nitroaniline	mg/kg (ppm)	4.2	87	86	57-114	1
Acenaphthene	mg/kg (ppm)	0.83	92	92	61-110	0
2,4-Dinitrophenol	mg/kg (ppm)	1.7	86	94	51-143	9
Dibenzofuran	mg/kg (ppm)	0.83	90	91	65-118	1
2,4-Dinitrotoluene	mg/kg (ppm)	0.83	110	109	47-146	1
4-Nitrophenol	mg/kg (ppm)	1.7	96	102	63-127	6
Diethyl phthalate	mg/kg (ppm)	0.83	104	107	63-124	3
Fluorene	mg/kg (ppm)	0.83	90	91	62-114	1
4-Chlorophenyl phenyl ether	mg/kg (ppm)	0.83	95	99	61-116	4
N-Nitrosodiphenylamine	mg/kg (ppm)	0.83	104	107	64-116	3
4-Nitroaniline	mg/kg (ppm)	4.2	103	106	63-117	3
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	0.83	91	97	59-152	6
Hexachlorobenzene	mg/kg (ppm)	0.83	88	92	57-115	4
Pentachlorophenol	mg/kg (ppm)	0.83	90	99	56-130	10
Phenanthrene	mg/kg (ppm)	0.83	93	93	64-112	0
Anthracene	mg/kg (ppm)	0.83	93	95	63-111	2
Carbazole	mg/kg (ppm)	0.83	96	97	68-120	1
Di-n-butyl phthalate	mg/kg (ppm)	0.83	110	114	52-130	4
Fluoranthene	mg/kg (ppm)	0.83	99	99	66-115	0
Pyrene	mg/kg (ppm)	0.83	95	93	65-112	2
Benzyl butyl phthalate	mg/kg (ppm)	0.83	88	91	56-131	3
Benz(a)anthracene	mg/kg (ppm)	0.83	92	91	64-116	1
Chrysene	mg/kg (ppm)	0.83	99	97	66-119	2
Bis(2-ethylhexyl) phthalate	mg/kg (ppm)	0.83	88	87	30-165	1
Di-n-octyl phthalate	mg/kg (ppm)	0.83	89	87	44-140	2
Benzo(a)pyrene	mg/kg (ppm)	0.83	93	91	62-116	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	91	87	61-118	4
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	92	89	65-119	3
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	98	97	64-130	1
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	94	94	67-131	0
Benzo(g,h,i)perylene	mg/kg (ppm)	0.83	95	95	67-126	0

Date of Report: 01/21/25
Date Received: 01/07/25
Project: Mercy Housing AS220138B, F&BI 501058

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 501058-01 (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	2.92	89 b	96 b	75-125	8 b
Barium	mg/kg (ppm)	50	61.9	90 b	98 b	75-125	9 b
Cadmium	mg/kg (ppm)	10	<1	90	97	75-125	7
Chromium	mg/kg (ppm)	50	15.8	74 b	81 b	75-125	9 b
Lead	mg/kg (ppm)	50	37.0	84 b	85 b	75-125	1 b
Mercury	mg/kg (ppm	5	<1	91	98	75-125	7
Selenium	mg/kg (ppm)	5	<1	84	87	75-125	4
Silver	mg/kg (ppm)	10	<1	90	97	75-125	7

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	93	80-120
Barium	mg/kg (ppm)	50	94	80-120
Cadmium	mg/kg (ppm)	10	96	80-120
Chromium	mg/kg (ppm)	50	94	80-120
Lead	mg/kg (ppm)	50	93	80-120
Mercury	mg/kg (ppm)	5	96	80-120
Selenium	mg/kg (ppm)	5	94	80-120
Silver	mg/kg (ppm)	10	97	80-120

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, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. 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 between the method detection limit and the lowest calibration point. 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.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

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.

501058

SAMPLE CHAIN OF CUSTODY

01/07/25 N3/A2

Page # 1 of 1

Report To Ali Cochrane + Hannah Cohen
Company Aspect Consulting
Address 710 2nd Ave, Suite #550
City, State, ZIP Seattle, WA
Phone ____ Email Ali.Cochrane + Hannah.Cohen @aspectconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: Mercy Housing
PO #: AS220138B

REMARKS
Project specific RLs? - Yes / No

INVOICE TO

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: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	SVOCs EPA 8270 ~~PAHs~~	PCBs EPA 8082	RCRA 8				Notes
AB-05-2.5	01 A-E	01/6/25	1253	S	5	X	X			X	X		X				HOLD
AB-05-4.5	02 A-F		1310		6												
AB-05-6	03 A-E		1325		5	X	X			X	X		X				
AB-05-9	04 A-F		1345		6												
AB-05-12	05 A-E		1405		6	X	X			X	X		X				
AB-05-13.5	06		1420		5												
AB-05-17	07		1435		5	X	X			X	X		X				
AB-05-19.5	08		1450		5												
AB-05-23	09		1530		5												
AB-05-25	10		1555		5	X	X			X	X		X				

X - for HG-1/15

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Favour Epuna	Aspect	01/6/25	1830
Received by:	Charmaine Harland	F&B	1.7.25	1043
Relinquished by:		Samples received at 2 oC		
Received by:				

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 501058 CLIENT Aspect INITIALS/ DATE: AP 01/07/25

If custody seals are present on cooler, are they intact? ☑ NA ☐ YES ☐ NO

Cooler/Sample temperature 2 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☑ YES ☐ NO

How did samples arrive?
☐ Over the Counter ☑ Picked up by F&BI ☐ FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/ Date: AP 01/07/25
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 1 days

Are the samples clearly identified? (explain "no" answer below) ☑ YES ☐ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☑ YES ☐ NO

Were appropriate sample containers used? ☑ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☑ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☑ NA ☐ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?
(explain "no" answer below)

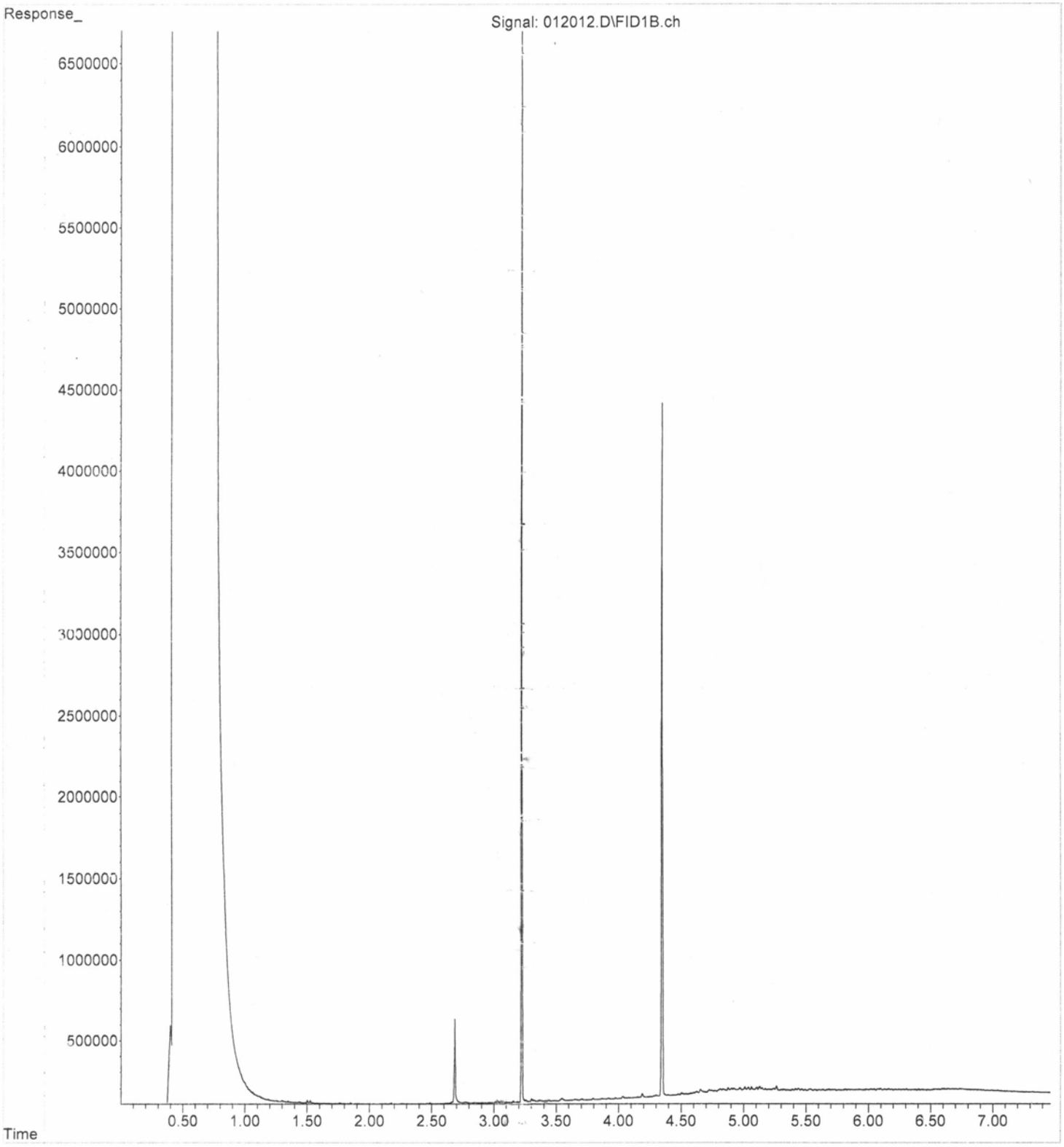
Sample ID's	☑ Yes ☐ No	☐ Not on COC/label
Date Sampled	☑ Yes ☐ No	☐ Not on COC/label
Time Sampled	☑ Yes ☐ No	☐ Not on COC/label
# of Containers	☑ Yes ☐ No	
Relinquished	☑ Yes ☐ No	
Requested analysis	☑ Yes ☐ On Hold	

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? ☑ NA ☐ YES ☐ NO

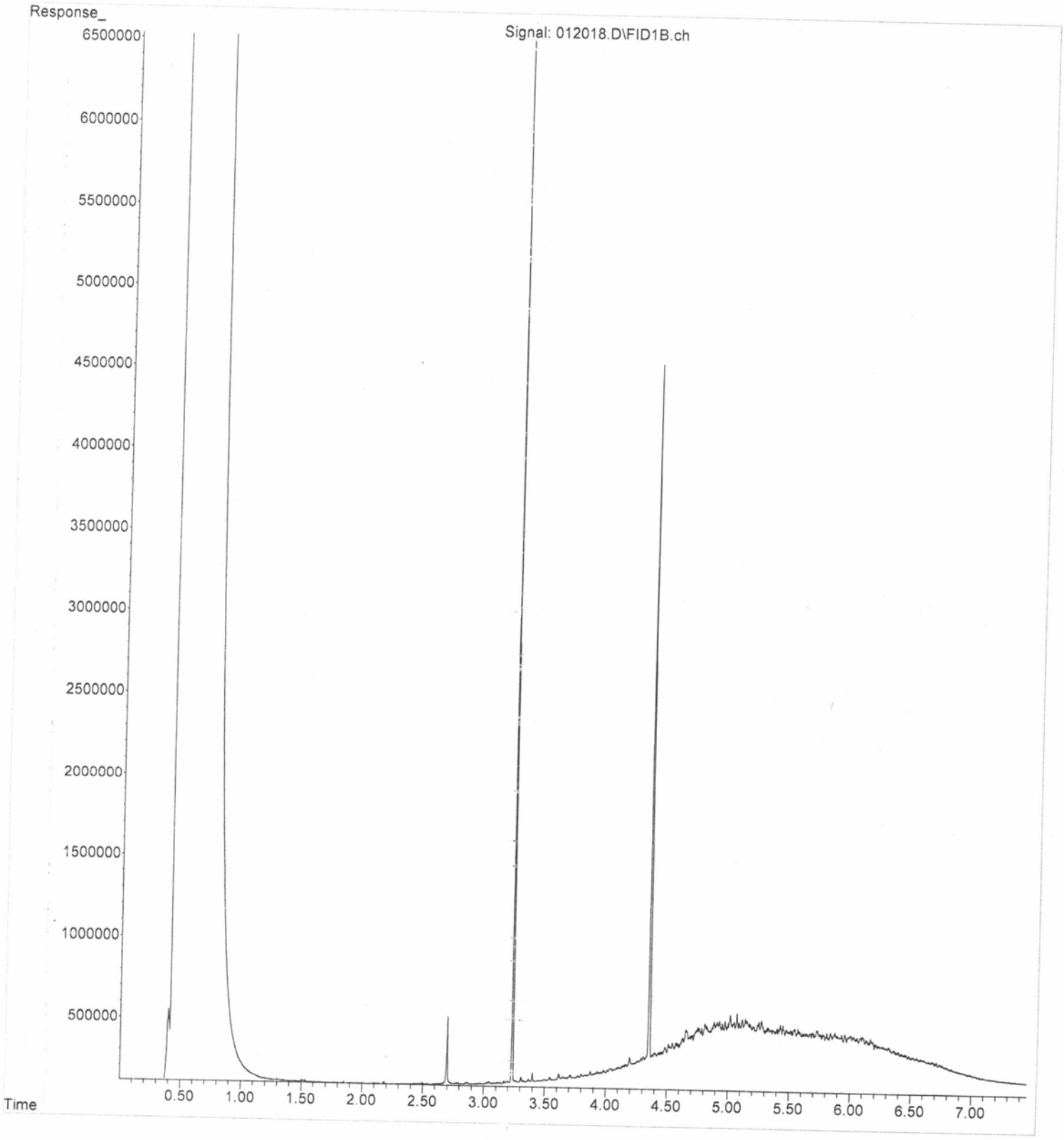
Number of unused TO15 canisters _____ Number of unused TO17 tubes _____

File :P:\Proc_GC13\01-20-25\012012.D
Operator : TL
Acquired : 20 Jan 2025 09:15 am using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501058-01
Misc Info : ERR
Vial Number: 12



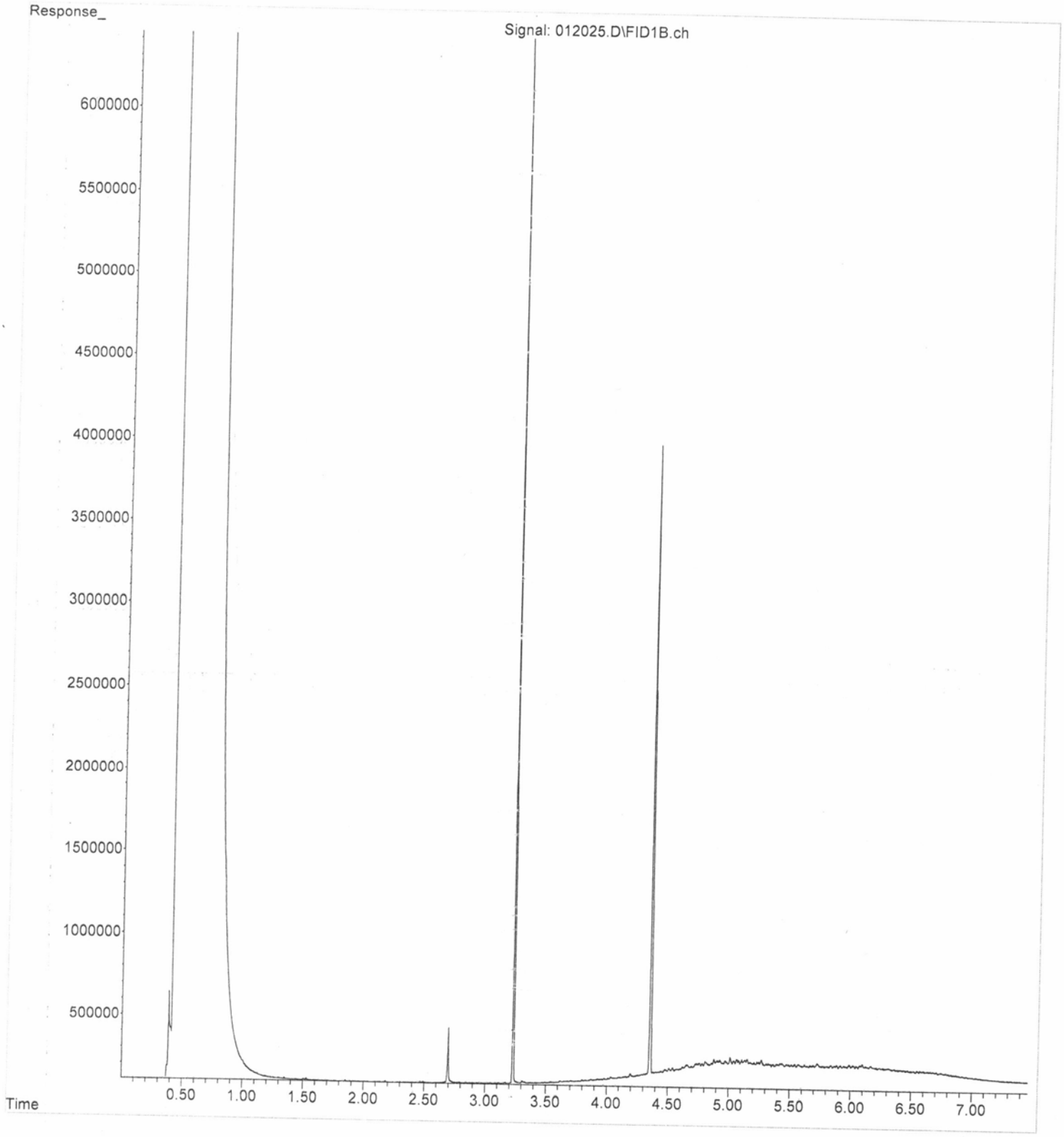
File :P:\Proc_GC13\01-20-25\012018.D
Operator : TL
Acquired : 20 Jan 2025 10:22 am using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501058-03
Misc Info :
Vial Number: 13

ERR

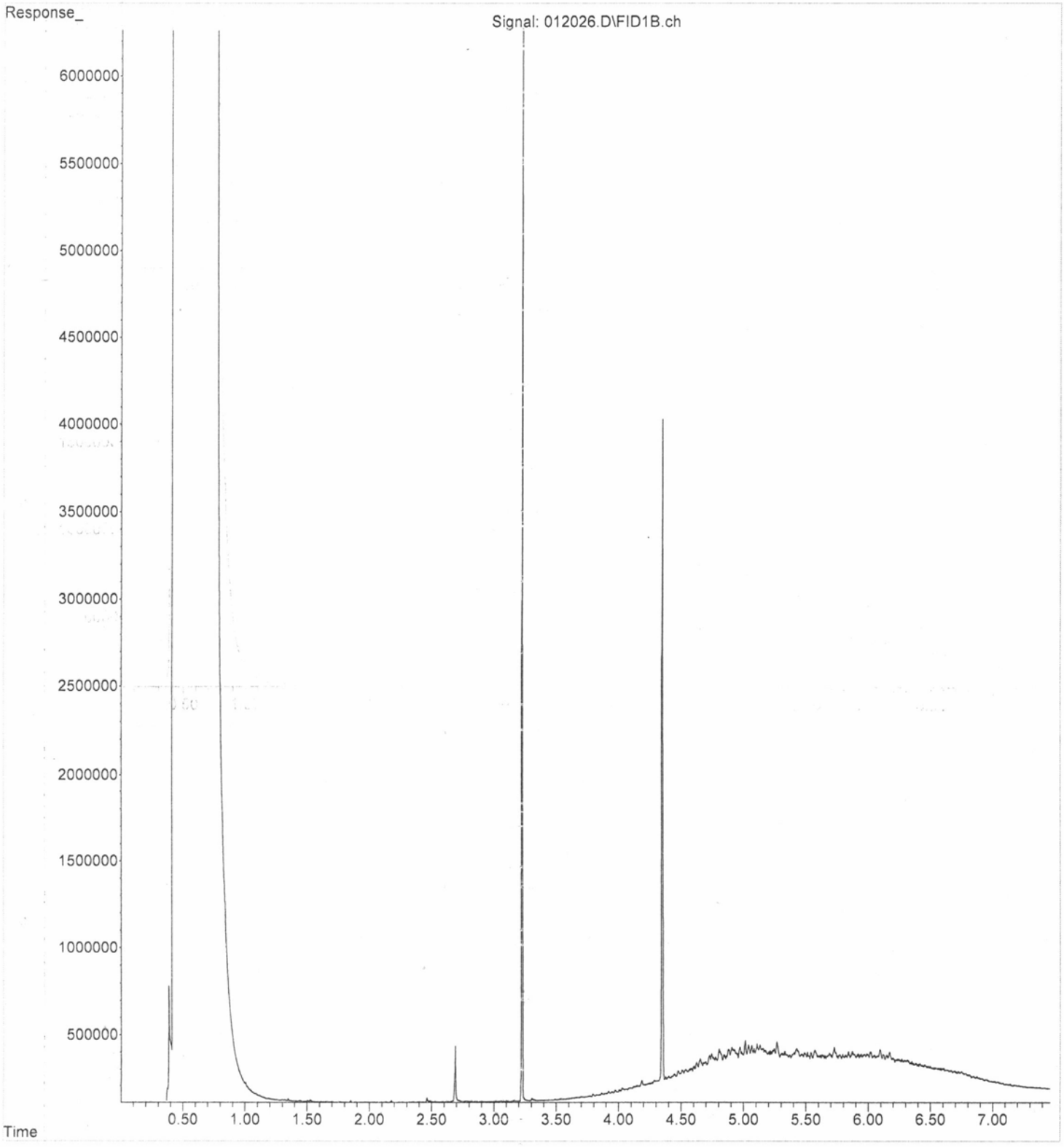


File :P:\Proc_GC13\01-20-25\012025.D
Operator : TL
Acquired : 20 Jan 2025 11:41 am using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501058-05
Misc Info :
Vial Number: 14

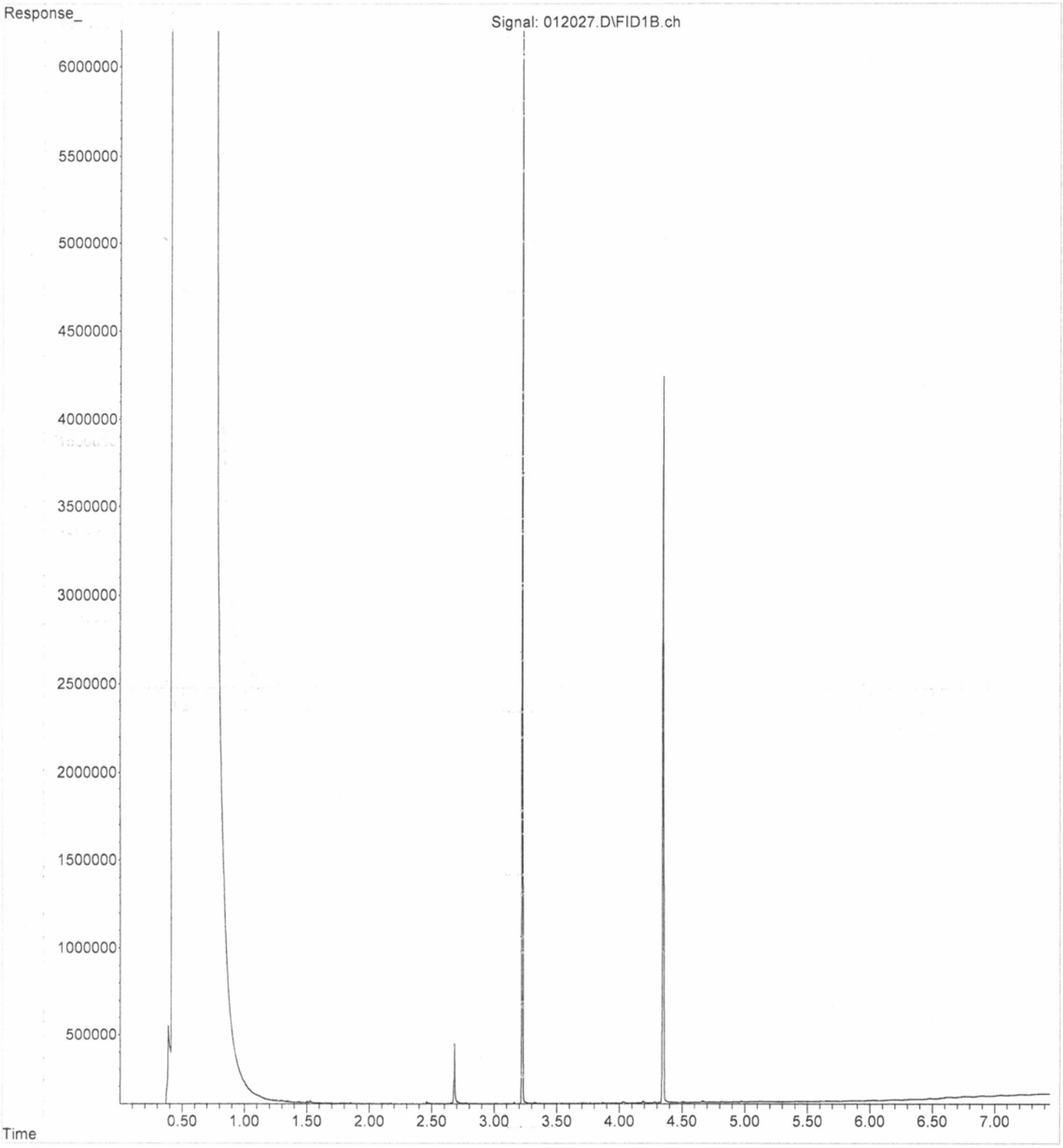
ERR



File :P:\Proc_GC13\01-20-25\012026.D
Operator : TL
Acquired : 20 Jan 2025 11:52 am using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501058-07
Misc Info : ERR
Vial Number: 15

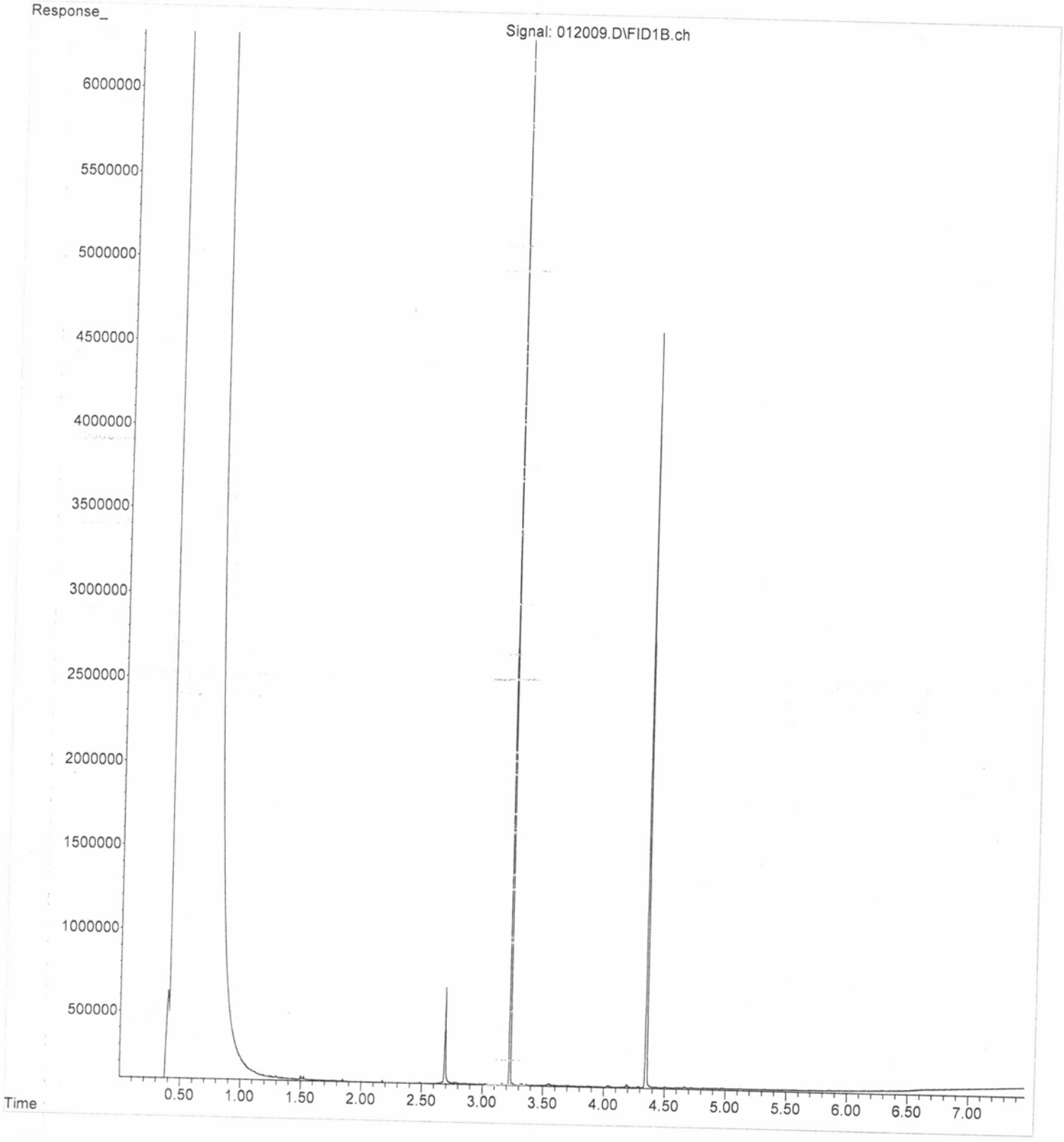


File :P:\Proc_GC13\01-20-25\012027.D
Operator : TL
Acquired : 20 Jan 2025 12:03 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501058-10
Misc Info : ERR
Vial Number: 16



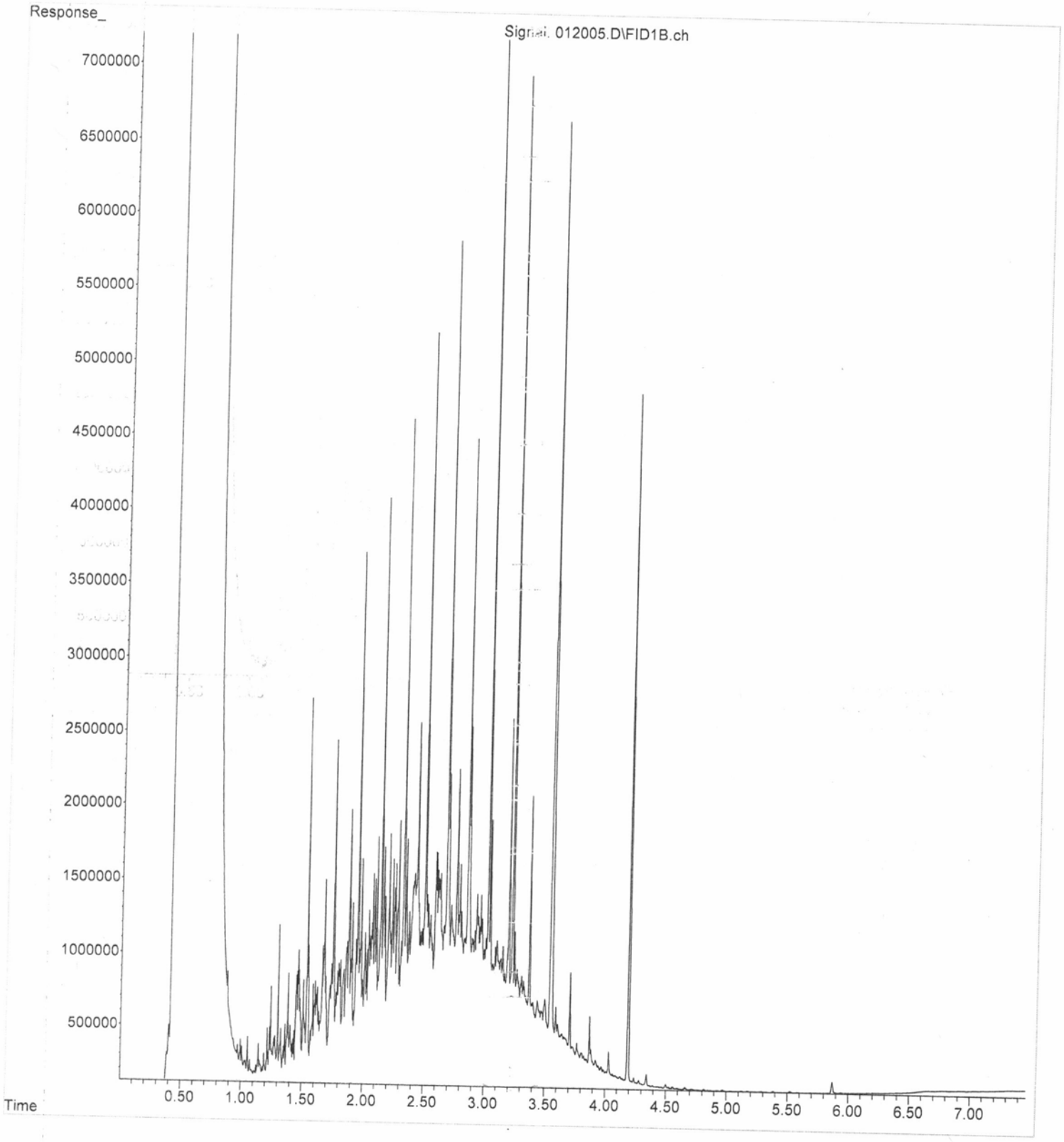
File :P:\Proc_GC13\01-20-25\012009.D
Operator : TL
Acquired : 20 Jan 2025 08:42 am using AcqMethod Dx.M
Instrument : GC13
Sample Name: 05-209 mb
Misc Info :
Vial Number: 9

ERR



File :P:\Proc_GC13\01-20-25\012005.D
Operator : TL
Acquired : 20 Jan 2025 07:52 am using AcqMethod Dx.M
Instrument : GC13
Sample Name: 500 Dx 74-61B
Misc Info :
Vial Number: 3

ERR



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

January 21, 2025

Ali Cochrane, Project Manager
Aspect Consulting
710 2nd Ave S, Suite 550
Seattle, WA 98104

Dear Ms Cochrane:

Included are the results from the testing of material submitted on January 8, 2025 from the Mercy Housing AS220138B, F&BI 501084 project. There are 41 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: Aspect Data, Hannah Cohen
ASP0121R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 8, 2025 by Friedman & Bruya, Inc. from the Aspect Consulting Mercy Housing AS220138B, F&BI 501084 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Aspect Consulting
501084 -01	AB-08-32.5
501084 -02	AB-08-38
501084 -03	AB-08-43
501084 -04	AB-08-47.5
501084 -05	AB-08-54
501084 -06	AB-08-55
501084 -07	AB-08-62
501084 -08	AB-08-67
501084 -09	AB-101-54
501084 -10	AB-08-73
501084 -11	AB-08-77
501084 -12	AB-08-83
501084 -13	AB-08-85

The 8260D chloroethane calibration standard did not meet the acceptance criteria. The data were flagged accordingly.

Dichlorodifluoromethane exceeded the acceptance criteria in the 8260D matrix spike sample. In addition, the 8260 acetone matrix spike and matrix spike duplicate relative percent difference did not meet the acceptance criteria. The compounds were not detected, therefore this did not represent an out of control condition.

The 8270E calibration standard did not meet the acceptance criteria for several compounds. The data were flagged accordingly.

An 8270E internal standard did not meet the acceptance criteria for sample AB-08-67. The sample was diluted and reanalyzed with acceptable results. Both data sets were reported.

All other quality control requirements were acceptable.

Date of Report: 01/21/25
Date Received: 01/08/25
Project: Mercy Housing AS220138B, F&BI 501084
Date Extracted: 01/16/25
Date Analyzed: 01/16/25

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)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
AB-08-32.5 501084-01	<5	95
AB-08-47.5 501084-04	<5	98
AB-08-54 501084-05	<5	103
AB-08-67 501084-08	<5	97
AB-101-54 501084-09	<5	99
AB-08-77 501084-11	<5	96
AB-08-83 501084-12	<5	106
AB-08-85 501084-13	<5	104
Method Blank 05-049 MB	<5	114

Date of Report: 01/21/25
Date Received: 01/08/25
Project: Mercy Housing AS220138B, F&BI 501084
Date Extracted: 01/16/25
Date Analyzed: 01/16/25

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)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
AB-08-32.5 501084-01	<50	<250	110
AB-08-47.5 501084-04	<50	<250	106
AB-08-54 501084-05	<50	<250	105
AB-08-67 501084-08	<50	<250	107
AB-101-54 501084-09	<50	<250	107
AB-08-77 501084-11	<50	<250	105
AB-08-83 501084-12	<50	<250	105
AB-08-85 501084-13	<50	<250	107
Method Blank 05-199 MB	<50	<250	104

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-08-32.5	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/17/25	Lab ID:	501084-01 1/0.5
Date Analyzed:	01/17/25	Data File:	011722.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	84	120
Toluene-d8	99	73	128
4-Bromofluorobenzene	98	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-08-47.5	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/17/25	Lab ID:	501084-04 1/0.5
Date Analyzed:	01/17/25	Data File:	011723.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	84	120
Toluene-d8	103	73	128
4-Bromofluorobenzene	99	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-08-54	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/17/25	Lab ID:	501084-05 1/0.5
Date Analyzed:	01/17/25	Data File:	011724.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	84	120
Toluene-d8	101	73	128
4-Bromofluorobenzene	103	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-08-67	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/17/25	Lab ID:	501084-08 1/0.5
Date Analyzed:	01/17/25	Data File:	011725.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	84	120
Toluene-d8	101	73	128
4-Bromofluorobenzene	100	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-101-54	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/17/25	Lab ID:	501084-09 1/0.5
Date Analyzed:	01/17/25	Data File:	011726.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	84	120
Toluene-d8	100	73	128
4-Bromofluorobenzene	101	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-08-77	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/17/25	Lab ID:	501084-11 1/0.5
Date Analyzed:	01/17/25	Data File:	011727.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	84	120
Toluene-d8	100	73	128
4-Bromofluorobenzene	104	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-08-83	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/17/25	Lab ID:	501084-12 1/0.5
Date Analyzed:	01/17/25	Data File:	011728.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	84	120
Toluene-d8	100	73	128
4-Bromofluorobenzene	99	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-08-85	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/17/25	Lab ID:	501084-13 1/0.5
Date Analyzed:	01/17/25	Data File:	011729.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	84	120
Toluene-d8	99	73	128
4-Bromofluorobenzene	101	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	Method Blank	Client:	Aspect Consulting
Date Received:	Not Applicable	Project:	Mercy Housing AS220138B
Date Extracted:	01/17/25	Lab ID:	05-0159 mb 1/0.5
Date Analyzed:	01/17/25	Data File:	011710.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	84	120
Toluene-d8	99	73	128
4-Bromofluorobenzene	100	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1 ca		

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-08-32.5	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501084-01 1/5
Date Analyzed:	01/17/25	Data File:	011708.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	84	22	119
Phenol-d6	90	38	124
Nitrobenzene-d5	84	10	198
2-Fluorobiphenyl	92	45	117
2,4,6-Tribromophenol	83	11	158
Terphenyl-d14	93	50	124

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5 ca
1,4-Dichlorobenzene	<0.05	Dibenzofuran	0.0041
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	0.0041
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5 ca
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5 ca
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	0.021
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	0.0099
Naphthalene	<0.005	Pyrene	0.0065
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	0.0036
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15 ca	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	0.0031
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-08-47.5	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501084-04 1/5
Date Analyzed:	01/17/25	Data File:	011719.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	83	14	115
Phenol-d6	92	29	121
Nitrobenzene-d5	109	16	137
2-Fluorobiphenyl	98	46	122
2,4,6-Tribromophenol	97	17	154
Terphenyl-d14	91	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-08-54	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501084-05 1/5
Date Analyzed:	01/17/25	Data File:	011720.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	76	14	115
Phenol-d6	87	29	121
Nitrobenzene-d5	87	16	137
2-Fluorobiphenyl	93	46	122
2,4,6-Tribromophenol	93	17	154
Terphenyl-d14	82	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	0.0030
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	0.0048
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	0.0058
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	0.046
Benzoic acid	<2.5	Anthracene	0.0047
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	0.039
Naphthalene	<0.005	Pyrene	0.026
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	0.0086
4-Chloro-3-methylphenol	<0.5	Chrysene	0.0095
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	0.0068
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	0.0095
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	0.0032
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-08-67	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501084-08 1/5
Date Analyzed:	01/17/25	Data File:	011721.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	83	14	115
Phenol-d6	92	29	121
Nitrobenzene-d5	105	16	137
2-Fluorobiphenyl	94	46	122
2,4,6-Tribromophenol	97	17	154
Terphenyl-d14	88 J	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025 J
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5 J
4-Chloroaniline	<5	Benz(a)anthracene	<0.005 J
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025 J
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8 J
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-08-67	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501084-08 1/50
Date Analyzed:	01/20/25	Data File:	012007.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	97 d	22	119
Phenol-d6	106 d	38	124
Nitrobenzene-d5	105 d	10	198
2-Fluorobiphenyl	117 d	45	117
2,4,6-Tribromophenol	84 d	11	158
Terphenyl-d14	116 d	50	124

Compounds:	Concentration mg/kg (ppm)
Pyrene	<0.025
Benzyl butyl phthalate	<5
Benz(a)anthracene	<0.05
Chrysene	<0.025
Bis(2-ethylhexyl) phthalate	<8

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-101-54	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501084-09 1/5
Date Analyzed:	01/17/25	Data File:	011722.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	78	14	115
Phenol-d6	87	29	121
Nitrobenzene-d5	88	16	137
2-Fluorobiphenyl	91	46	122
2,4,6-Tribromophenol	92	17	154
Terphenyl-d14	85	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	0.014
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	0.011
Naphthalene	<0.005	Pyrene	0.0070
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	0.0027
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	0.0028
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-08-77	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501084-11 1/5
Date Analyzed:	01/17/25	Data File:	011723.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	72	14	115
Phenol-d6	82	29	121
Nitrobenzene-d5	86	16	137
2-Fluorobiphenyl	89	46	122
2,4,6-Tribromophenol	90	17	154
Terphenyl-d14	81	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-08-83	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501084-12 1/5
Date Analyzed:	01/17/25	Data File:	011718.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	82	14	115
Phenol-d6	92	29	121
Nitrobenzene-d5	96	16	137
2-Fluorobiphenyl	102	46	122
2,4,6-Tribromophenol	98	17	154
Terphenyl-d14	92	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	0.0079
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	0.0052
Naphthalene	<0.005	Pyrene	0.0029
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-08-85	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501084-13 1/5
Date Analyzed:	01/17/25	Data File:	011724.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	82	14	115
Phenol-d6	93	29	121
Nitrobenzene-d5	97	16	137
2-Fluorobiphenyl	100	46	122
2,4,6-Tribromophenol	103	17	154
Terphenyl-d14	98	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	0.014
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	0.0060
Naphthalene	<0.005	Pyrene	0.0031
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	Aspect Consulting
Date Received:	Not Applicable	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	05-0203 mb 1/5
Date Analyzed:	01/16/25	Data File:	011619.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	86	22	119
Phenol-d6	93	38	124
Nitrobenzene-d5	93	10	198
2-Fluorobiphenyl	97	45	117
2,4,6-Tribromophenol	96	11	158
Terphenyl-d14	101	50	124

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5 ca
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15 ca	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-08-32.5	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501084-01
Date Analyzed:	01/15/25	Data File:	501084-01.166
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.5
Barium	26
Cadmium	<1
Chromium	11
Lead	2.8
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-08-47.5	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501084-04
Date Analyzed:	01/16/25	Data File:	501084-04.064
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.1
Barium	36
Cadmium	<1
Chromium	12
Lead	2.5
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-08-54	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501084-05
Date Analyzed:	01/16/25	Data File:	501084-05.065
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.7
Barium	46
Cadmium	<1
Lead	2.9
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-08-54	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501084-05 x5
Date Analyzed:	01/16/25	Data File:	501084-05 x5.207
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Chromium	27

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-08-67	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501084-08
Date Analyzed:	01/16/25	Data File:	501084-08.066
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.2
Barium	47
Cadmium	<1
Chromium	12
Lead	2.1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-101-54	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501084-09
Date Analyzed:	01/16/25	Data File:	501084-09.067
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.0
Barium	38
Cadmium	<1
Chromium	17
Lead	7.2
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-08-77	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501084-11
Date Analyzed:	01/16/25	Data File:	501084-11.068
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.0
Barium	37
Cadmium	<1
Chromium	12
Lead	2.2
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-08-83	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501084-12
Date Analyzed:	01/16/25	Data File:	501084-12.069
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.8
Barium	44
Cadmium	<1
Lead	2.1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-08-83	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501084-12 x5
Date Analyzed:	01/16/25	Data File:	501084-12 x5.225
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Chromium	23

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-08-85	Client:	Aspect Consulting
Date Received:	01/08/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501084-13
Date Analyzed:	01/16/25	Data File:	501084-13.070
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.5
Barium	45
Cadmium	<1
Chromium	19
Lead	2.3
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Aspect Consulting
Date Received:	NA	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	I5-37 mb
Date Analyzed:	01/15/25	Data File:	I5-37 mb.161
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Date of Report: 01/21/25
Date Received: 01/08/25
Project: Mercy Housing AS220138B, F&BI 501084

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TPH AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code: 501058-01 (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)	40	80	70-130

Date of Report: 01/21/25
Date Received: 01/08/25
Project: Mercy Housing AS220138B, F&BI 501084

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 501132-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	110	114	64-136	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	110	78-121

Date of Report: 01/21/25
Date Received: 01/08/25
Project: Mercy Housing AS220138B, F&BI 501084

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 501181-02 (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	<0.5	51 vo	45	10-47	12
Chloromethane	mg/kg (ppm)	2	<0.5	65	60	10-88	8
Vinyl chloride	mg/kg (ppm)	2	<0.05	64	59	10-79	8
Bromomethane	mg/kg (ppm)	2	<0.5	56	51	10-85	9
Chloroethane	mg/kg (ppm)	2	<0.5	50	51	11-106	2
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	73	66	10-85	10
Acetone	mg/kg (ppm)	10	<5	34	45	10-224	28 vo
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	88	81	11-105	8
Hexane	mg/kg (ppm)	2	<0.25	83	85	10-106	2
Methylene chloride	mg/kg (ppm)	2	<0.5	77	71	10-139	8
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	77	72	18-131	7
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	89	82	16-122	8
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	80	73	19-125	9
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	80	72	10-184	11
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	82	76	18-129	8
Chloroform	mg/kg (ppm)	2	<0.05	75	70	18-126	7
2-Butanone (MEK)	mg/kg (ppm)	10	<1	50	53	10-190	6
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	73	67	19-138	9
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	79	73	16-126	8
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	84	79	19-129	6
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	82	75	13-125	9
Benzene	mg/kg (ppm)	2	<0.03	85	79	15-129	7
Trichloroethene	mg/kg (ppm)	2	<0.02	89	82	14-127	8
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	84	77	17-137	9
Bromodichloromethane	mg/kg (ppm)	2	<0.05	81	74	24-130	9
Dibromomethane	mg/kg (ppm)	2	<0.05	81	75	20-138	8
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	81	77	21-139	5
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	85	79	17-135	7
Toluene	mg/kg (ppm)	2	<0.05	90	83	15-129	8
trans-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	82	78	18-130	5
1,1,2-Trichloroethane	mg/kg (ppm)	2	<0.05	83	77	29-128	7
2-Hexanone	mg/kg (ppm)	10	<1	57	56	28-142	2
1,3-Dichloropropane	mg/kg (ppm)	2	<0.05	81	76	20-135	6
Tetrachloroethene	mg/kg (ppm)	2	<0.025	93	85	20-121	9
Dibromochloromethane	mg/kg (ppm)	2	<0.05	85	78	11-138	9
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	83	78	21-130	6
Chlorobenzene	mg/kg (ppm)	2	<0.05	88	81	19-129	8
Ethylbenzene	mg/kg (ppm)	2	<0.05	88	82	23-133	7
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	83	76	16-127	9
m,p-Xylene	mg/kg (ppm)	4	<0.1	90	83	19-134	8
o-Xylene	mg/kg (ppm)	2	<0.05	88	81	20-132	8
Styrene	mg/kg (ppm)	2	<0.05	91	84	23-127	8
Isopropylbenzene	mg/kg (ppm)	2	<0.05	97	90	21-134	7
Bromoform	mg/kg (ppm)	2	<0.05	80	75	10-142	6
n-Propylbenzene	mg/kg (ppm)	2	<0.05	88	81	10-141	8
Bromobenzene	mg/kg (ppm)	2	<0.05	85	79	10-135	7
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	88	81	20-136	8
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	81	73	10-234	10
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	74	68	10-144	8
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	86	78	10-139	10
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	85	77	10-139	10
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	86	79	10-144	8
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	<0.05	89	81	24-133	9
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	89	82	23-134	8
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	92	83	25-131	10
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	89	82	10-143	8
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	89	81	10-146	9
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	89	81	10-144	9
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	75	71	10-163	5
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	92	86	10-147	7
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	95	88	10-162	8
Naphthalene	mg/kg (ppm)	2	<0.05	92	85	30-138	8
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	89	84	10-173	6

Date of Report: 01/21/25
Date Received: 01/08/25
Project: Mercy Housing AS220138B, F&BI 501084

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2	57	10-93
Chloromethane	mg/kg (ppm)	2	71	34-101
Vinyl chloride	mg/kg (ppm)	2	80	47-106
Bromomethane	mg/kg (ppm)	2	52	38-123
Chloroethane	mg/kg (ppm)	2	58	44-123
Trichlorofluoromethane	mg/kg (ppm)	2	84	56-108
Acetone	mg/kg (ppm)	10	85	24-185
1,1-Dichloroethene	mg/kg (ppm)	2	92	61-118
Hexane	mg/kg (ppm)	2	103	54-142
Methylene chloride	mg/kg (ppm)	2	95	10-213
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	95	70-130
trans-1,2-Dichloroethene	mg/kg (ppm)	2	99	70-130
1,1-Dichloroethane	mg/kg (ppm)	2	91	70-130
2,2-Dichloropropane	mg/kg (ppm)	2	104	45-172
cis-1,2-Dichloroethene	mg/kg (ppm)	2	95	70-130
Chloroform	mg/kg (ppm)	2	88	70-130
2-Butanone (MEK)	mg/kg (ppm)	10	88	36-182
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	84	66-140
1,1,1-Trichloroethane	mg/kg (ppm)	2	90	70-130
1,1-Dichloropropene	mg/kg (ppm)	2	96	70-130
Carbon tetrachloride	mg/kg (ppm)	2	93	68-146
Benzene	mg/kg (ppm)	2	98	70-130
Trichloroethene	mg/kg (ppm)	2	96	53-133
1,2-Dichloropropane	mg/kg (ppm)	2	97	67-137
Bromodichloromethane	mg/kg (ppm)	2	93	70-130
Dibromomethane	mg/kg (ppm)	2	96	70-130
4-Methyl-2-pentanone	mg/kg (ppm)	10	106	70-130
cis-1,3-Dichloropropene	mg/kg (ppm)	2	100	70-130
Toluene	mg/kg (ppm)	2	103	63-127
trans-1,3-Dichloropropene	mg/kg (ppm)	2	99	70-130
1,1,2-Trichloroethane	mg/kg (ppm)	2	98	70-130
2-Hexanone	mg/kg (ppm)	10	91	65-148
1,3-Dichloropropane	mg/kg (ppm)	2	96	67-135
Tetrachloroethene	mg/kg (ppm)	2	102	59-138
Dibromochloromethane	mg/kg (ppm)	2	99	61-154
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	98	70-130
Chlorobenzene	mg/kg (ppm)	2	101	65-133
Ethylbenzene	mg/kg (ppm)	2	102	60-140
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	96	68-129
m,p-Xylene	mg/kg (ppm)	4	104	56-145
o-Xylene	mg/kg (ppm)	2	102	61-137
Styrene	mg/kg (ppm)	2	108	61-138
Isopropylbenzene	mg/kg (ppm)	2	114	52-148
Bromoform	mg/kg (ppm)	2	97	57-166
n-Propylbenzene	mg/kg (ppm)	2	103	36-162
Bromobenzene	mg/kg (ppm)	2	101	63-127
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	101	43-156
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	100	35-184
1,2,3-Trichloropropane	mg/kg (ppm)	2	89	70-130
2-Chlorotoluene	mg/kg (ppm)	2	100	50-146
4-Chlorotoluene	mg/kg (ppm)	2	100	47-150
tert-Butylbenzene	mg/kg (ppm)	2	100	41-154
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	103	42-159
sec-Butylbenzene	mg/kg (ppm)	2	104	25-175
p-Isopropyltoluene	mg/kg (ppm)	2	105	18-186
1,3-Dichlorobenzene	mg/kg (ppm)	2	102	49-149
1,4-Dichlorobenzene	mg/kg (ppm)	2	100	48-149
1,2-Dichlorobenzene	mg/kg (ppm)	2	100	58-139
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	88	70-130
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	104	39-166
Hexachlorobutadiene	mg/kg (ppm)	2	105	41-186
Naphthalene	mg/kg (ppm)	2	104	67-143
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	103	49-165

Date of Report: 01/21/25
Date Received: 01/08/25
Project: Mercy Housing AS220138B, F&BI 501084

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270E

Laboratory Code: 501132-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Pyridine	mg/kg (ppm)	0.83	<0.5	65	57	10-108	13
Phenol	mg/kg (ppm)	0.83	<0.25	83	81	36-118	2
Bis(2-chloroethyl) ether	mg/kg (ppm)	0.83	<0.05	78	80	24-116	3
2-Chlorophenol	mg/kg (ppm)	0.83	<0.5	84	81	24-125	4
1,3-Dichlorobenzene	mg/kg (ppm)	0.83	<0.05	79	76	17-116	4
1,4-Dichlorobenzene	mg/kg (ppm)	0.83	<0.05	80	77	18-118	4
1,2-Dichlorobenzene	mg/kg (ppm)	0.83	<0.05	80	77	22-117	4
Benzyl alcohol	mg/kg (ppm)	4.2	<0.5	82	81	36-121	1
2,2'-Oxybis(1-chloropropane)	mg/kg (ppm)	0.83	<0.05	83	82	20-126	1
2-Methylphenol	mg/kg (ppm)	0.83	<0.5	84	82	38-120	2
Hexachloroethane	mg/kg (ppm)	0.83	<0.05	81	82	10-207	1
N-Nitroso-di-n-propylamine	mg/kg (ppm)	0.83	<0.05	90	88	10-176	2
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	0.83	<1	83	85	39-121	2
Nitrobenzene	mg/kg (ppm)	0.83	<0.05	65	66	10-186	2
Isophorone	mg/kg (ppm)	0.83	<0.05	85	87	29-155	2
2-Nitrophenol	mg/kg (ppm)	0.83	<0.5	83	89	16-148	7
2,4-Dimethylphenol	mg/kg (ppm)	0.83	<0.5	80	83	17-130	4
Benzoic acid	mg/kg (ppm)	2.5	<2.5	61	67	10-101	9
Bis(2-chloroethoxy)methane	mg/kg (ppm)	0.83	<0.05	81	84	37-121	4
2,4-Dichlorophenol	mg/kg (ppm)	0.83	<0.5	85	88	19-144	3
1,2,4-Trichlorobenzene	mg/kg (ppm)	0.83	<0.05	81	82	35-116	1
Naphthalene	mg/kg (ppm)	0.83	<0.005	81	82	28-125	1
Hexachlorobutadiene	mg/kg (ppm)	0.83	<0.05	81	79	25-126	2
4-Chloroaniline	mg/kg (ppm)	6.8	<5	75	78	21-117	4
4-Chloro-3-methylphenol	mg/kg (ppm)	0.83	<0.5	92	93	36-138	1
2-Methylnaphthalene	mg/kg (ppm)	0.83	<0.0025	88	89	10-192	1
1-Methylnaphthalene	mg/kg (ppm)	0.83	<0.0025	88	88	10-163	0
Hexachlorocyclopentadiene	mg/kg (ppm)	0.83	<0.15	85	85	10-136	0
2,4,6-Trichlorophenol	mg/kg (ppm)	0.83	<0.5	88	88	16-151	0
2,4,5-Trichlorophenol	mg/kg (ppm)	0.83	<0.5	94	93	20-139	1
2-Chloronaphthalene	mg/kg (ppm)	0.83	<0.05	84	83	42-117	1
2-Nitroaniline	mg/kg (ppm)	4.2	<0.25	70	71	50-150	1
Dimethyl phthalate	mg/kg (ppm)	0.83	<0.5	93	88	50-150	6
Acenaphthylene	mg/kg (ppm)	0.83	<0.0025	89	89	45-128	0
2,6-Dinitrotoluene	mg/kg (ppm)	0.83	<0.25	96	93	11-182	3
3-Nitroaniline	mg/kg (ppm)	4.2	<5	75	84	36-110	11
Acenaphthene	mg/kg (ppm)	0.83	<0.0025	90	86	36-125	5
2,4-Dinitrophenol	mg/kg (ppm)	1.7	<1.5	86	86	10-135	0
Dibenzofuran	mg/kg (ppm)	0.83	<0.0025	94	90	44-125	4
2,4-Dinitrotoluene	mg/kg (ppm)	0.83	<0.25	102	103	37-149	1
4-Nitrophenol	mg/kg (ppm)	1.7	<1.5	96	95	24-159	1
Diethyl phthalate	mg/kg (ppm)	0.83	<0.5	95	92	48-126	3
Fluorene	mg/kg (ppm)	0.83	<0.0025	94	92	48-121	2
4-Chlorophenyl phenyl ether	mg/kg (ppm)	0.83	<0.05	93	89	50-150	4
N-Nitrosodiphenylamine	mg/kg (ppm)	0.83	<0.05	88	88	10-190	0
4-Nitroaniline	mg/kg (ppm)	4.2	<5	81	86	10-150	6
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	0.83	<1.5	103	104	10-148	1
Hexachlorobenzene	mg/kg (ppm)	0.83	<0.05	78	77	50-150	1
Pentachlorophenol	mg/kg (ppm)	0.83	<0.25	95	99	18-159	4
Phenanthrene	mg/kg (ppm)	0.83	0.016	95	95	46-122	0
Anthracene	mg/kg (ppm)	0.83	0.0026	96	96	30-144	0
Carbazole	mg/kg (ppm)	0.83	0.0023	91	92	50-150	1
Di-n-butyl phthalate	mg/kg (ppm)	0.83	<0.5	101	98	43-124	3
Fluoranthene	mg/kg (ppm)	0.83	0.046	99	98	50-150	1
Pyrene	mg/kg (ppm)	0.83	0.036	89	88	40-134	1
Benzyl butyl phthalate	mg/kg (ppm)	0.83	<0.5	93	94	14-187	1
Benz(a)anthracene	mg/kg (ppm)	0.83	0.020	92	91	50-150	1
Chrysene	mg/kg (ppm)	0.83	0.025	88	88	50-150	0
Bis(2-ethylhexyl) phthalate	mg/kg (ppm)	0.83	<0.8	95	94	45-130	1
Di-n-octyl phthalate	mg/kg (ppm)	0.83	<0.5	104	108	25-161	4
Benzo(a)pyrene	mg/kg (ppm)	0.83	0.026	95	93	50-150	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	0.035	96	95	50-150	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	0.013	95	94	50-150	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	0.015	82	81	40-140	1
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	<0.005	85	84	41-136	1
Benzo(g,h,i)perylene	mg/kg (ppm)	0.83	<0.03	79	76	29-139	4

Date of Report: 01/21/25
Date Received: 01/08/25
Project: Mercy Housing AS220138B, F&BI 501084

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270E

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Pyridine	mg/kg (ppm)	0.83	57	20-82
Phenol	mg/kg (ppm)	0.83	89	47-128
Bis(2-chloroethyl) ether	mg/kg (ppm)	0.83	90	35-131
2-Chlorophenol	mg/kg (ppm)	0.83	92	58-111
1,3-Dichlorobenzene	mg/kg (ppm)	0.83	89	47-109
1,4-Dichlorobenzene	mg/kg (ppm)	0.83	91	46-110
1,2-Dichlorobenzene	mg/kg (ppm)	0.83	89	50-110
Benzyl alcohol	mg/kg (ppm)	4.2	92	36-147
2,2'-Oxybis(1-chloropropane)	mg/kg (ppm)	0.83	95	54-113
2-Methylphenol	mg/kg (ppm)	0.83	93	60-114
Hexachloroethane	mg/kg (ppm)	0.83	96	45-111
N-Nitroso-di-n-propylamine	mg/kg (ppm)	0.83	97	70-130
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	0.83	94	66-112
Nitrobenzene	mg/kg (ppm)	0.83	76	59-111
Isophorone	mg/kg (ppm)	0.83	97	52-128
2-Nitrophenol	mg/kg (ppm)	0.83	96	60-121
2,4-Dimethylphenol	mg/kg (ppm)	0.83	97	53-119
Benzoic acid	mg/kg (ppm)	2.5	83	13-223
Bis(2-chloroethoxy)methane	mg/kg (ppm)	0.83	94	64-112
2,4-Dichlorophenol	mg/kg (ppm)	0.83	98	63-111
1,2,4-Trichlorobenzene	mg/kg (ppm)	0.83	95	56-111
Naphthalene	mg/kg (ppm)	0.83	93	57-107
Hexachlorobutadiene	mg/kg (ppm)	0.83	91	49-119
4-Chloroaniline	mg/kg (ppm)	6.8	82	10-136
4-Chloro-3-methylphenol	mg/kg (ppm)	0.83	102	70-130
2-Methylnaphthalene	mg/kg (ppm)	0.83	98	63-112
1-Methylnaphthalene	mg/kg (ppm)	0.83	97	63-113
Hexachlorocyclopentadiene	mg/kg (ppm)	0.83	101	46-127
2,4,6-Trichlorophenol	mg/kg (ppm)	0.83	98	65-116
2,4,5-Trichlorophenol	mg/kg (ppm)	0.83	105	67-117
2-Chloronaphthalene	mg/kg (ppm)	0.83	99	67-109
2-Nitroaniline	mg/kg (ppm)	4.2	66	46-148
Dimethyl phthalate	mg/kg (ppm)	0.83	103	70-130
Acenaphthylene	mg/kg (ppm)	0.83	104	70-130
2,6-Dinitrotoluene	mg/kg (ppm)	0.83	104	70-130
Acenaphthene	mg/kg (ppm)	0.83	101	66-112
2,4-Dinitrophenol	mg/kg (ppm)	1.7	99	63-132
Dibenzofuran	mg/kg (ppm)	0.83	103	63-117
2,4-Dinitrotoluene	mg/kg (ppm)	0.83	113	52-140
4-Nitrophenol	mg/kg (ppm)	1.7	116	16-187
Diethyl phthalate	mg/kg (ppm)	0.83	103	64-120
Fluorene	mg/kg (ppm)	0.83	103	67-117
4-Chlorophenyl phenyl ether	mg/kg (ppm)	0.83	101	70-130
N-Nitrosodiphenylamine	mg/kg (ppm)	0.83	96	61-118
4-Nitroaniline	mg/kg (ppm)	4.2	59	28-121
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	0.83	108	51-152
Hexachlorobenzene	mg/kg (ppm)	0.83	83	70-130
Pentachlorophenol	mg/kg (ppm)	0.83	104	60-133
Phenanthrene	mg/kg (ppm)	0.83	103	70-130
Anthracene	mg/kg (ppm)	0.83	104	70-130
Carbazole	mg/kg (ppm)	0.83	77	63-122
Di-n-butyl phthalate	mg/kg (ppm)	0.83	102	48-128
Fluoranthene	mg/kg (ppm)	0.83	109	70-130
Pyrene	mg/kg (ppm)	0.83	93	70-130
Benzyl butyl phthalate	mg/kg (ppm)	0.83	92	64-135
Benz(a)anthracene	mg/kg (ppm)	0.83	96	70-130
Chrysene	mg/kg (ppm)	0.83	95	70-130
Bis(2-ethylhexyl) phthalate	mg/kg (ppm)	0.83	90	59-116
Di-n-octyl phthalate	mg/kg (ppm)	0.83	93	46-129
Benzo(a)pyrene	mg/kg (ppm)	0.83	95	68-120
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	97	67-128
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	98	70-130
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	101	67-129
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	104	67-128
Benzo(g,h,i)perylene	mg/kg (ppm)	0.83	102	65-130

Date of Report: 01/21/25
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Project: Mercy Housing AS220138B, F&BI 501084

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 501084-01 (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	2.30	102 b	98 b	75-125	4 b
Barium	mg/kg (ppm)	50	23.9	106 b	95 b	75-125	11 b
Cadmium	mg/kg (ppm)	10	<1	98	99	75-125	1
Chromium	mg/kg (ppm)	50	10.1	86 b	86 b	75-125	0 b
Lead	mg/kg (ppm)	50	2.56	94	93	75-125	1
Mercury	mg/kg (ppm	5	<1	98	100	75-125	2
Selenium	mg/kg (ppm)	5	<1	95	97	75-125	2
Silver	mg/kg (ppm)	10	<1	96	98	75-125	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	98	80-120
Barium	mg/kg (ppm)	50	102	80-120
Cadmium	mg/kg (ppm)	10	100	80-120
Chromium	mg/kg (ppm)	50	100	80-120
Lead	mg/kg (ppm)	50	100	80-120
Mercury	mg/kg (ppm)	5	106	80-120
Selenium	mg/kg (ppm)	5	98	80-120
Silver	mg/kg (ppm)	10	100	80-120

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, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. 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 between the method detection limit and the lowest calibration point. 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.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

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.

501084

SAMPLE CHAIN OF CUSTODY

01/08/25

N2 / A2

Page # 1 of 2

Report To Ali Cochrane + Hannah Cohen

Company Aspect Consulting

Address 710 2nd Ave, Suite #550

City, State, ZIP Seattle, WA

Phone _____ Email Ali.Cochrane + Hannah.Cohen @aspectconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: Mercy Housing

PO #: AS220138B

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

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: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270 SVOC	PCBs EPA 8082	PCLAB				Notes
AB-08-32.5	01 A-E	1/7/25	0905	S	5	X	X			X	X		X				X-per HC MG 1/14
AB-08-38	02		0930														HOLD
AB-08-43	03		1025														
AB-08-47.5	04		1050			X	X			X	X		X				
AB-08-54	05		1130			X	X			X	X		X				
AB-08-55	06		1150														
AB-08-62	07		1330														
AB-08-67	08		1410			X	X			X	X		X				
AB-101-54	09		0955			X	X			X	X		X				
AB-08-73	10		1535														

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Favour Ejuru	Aspect	1/8/25	1750
Received by:	JOE MOHAMMED	FBI	01/08/25	1750
Relinquished by:		Samples received at 3 °C		
Received by:				

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

501084

SAMPLE CHAIN OF CUSTODY

01/08/25

N2/A2

Page # 2 of 2

Report To Ali Cochrane, Hannah Cohen

Company Aspect Consulting

Address 700 2nd Ave, Suite #550

City, State, ZIP Seattle, WA

Phone _____ Email Ali.cochrane + Hannah.Cohen @aspectconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: Mercy Housing

PO #: AS220138B

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

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: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	SVOCs PAHs EPA 8270	PCBs EPA 8082	RCRA 8				Notes
AB-05-77	11 A-E	1/8/25	0845	S	5	X	X			X	X		X				X-per lab MG 1/11
AB-05-83	12	↓	1010	S	↓	X	X			X	X		X				HOLD
AB-05-85	13	↓	1205	S	↓	X	X			X	X		X				↓

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Favour Ejuna	Aspect	1/8/25	1750
Received by:	JOE MOHAMMED	FBE	01/08/25	1750
Relinquished by:		Samples received at 3 °C		
Received by:				

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 501084 CLIENT ASP INITIALS/ DATE: 01/08/25 JM

If custody seals are present on cooler, are they intact? ☒ NA ☐ YES ☐ NO

Cooler/Sample temperature 3 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☒ YES ☐ NO

How did samples arrive?
☒ Over the Counter ☐ Picked up by F&BI ☐ FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? ☒ YES ☐ NO Initials/ Date: NA 01/09
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 0 > 1 days

Are the samples clearly identified? (explain "no" answer below) ☒ YES ☐ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☒ YES ☐ NO

Were appropriate sample containers used? ☒ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☒ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☒ NA ☐ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?
(explain "no" answer below)

Sample ID's	☒ Yes ☐ No	☐ Not on COC/label
Date Sampled	☒ Yes ☐ No	☐ Not on COC/label
Time Sampled	☒ Yes ☐ No	☐ Not on COC/label
# of Containers	☒ Yes ☐ No	
Relinquished	☒ Yes ☐ No	
Requested analysis	☐ Yes ☒ On Hold	

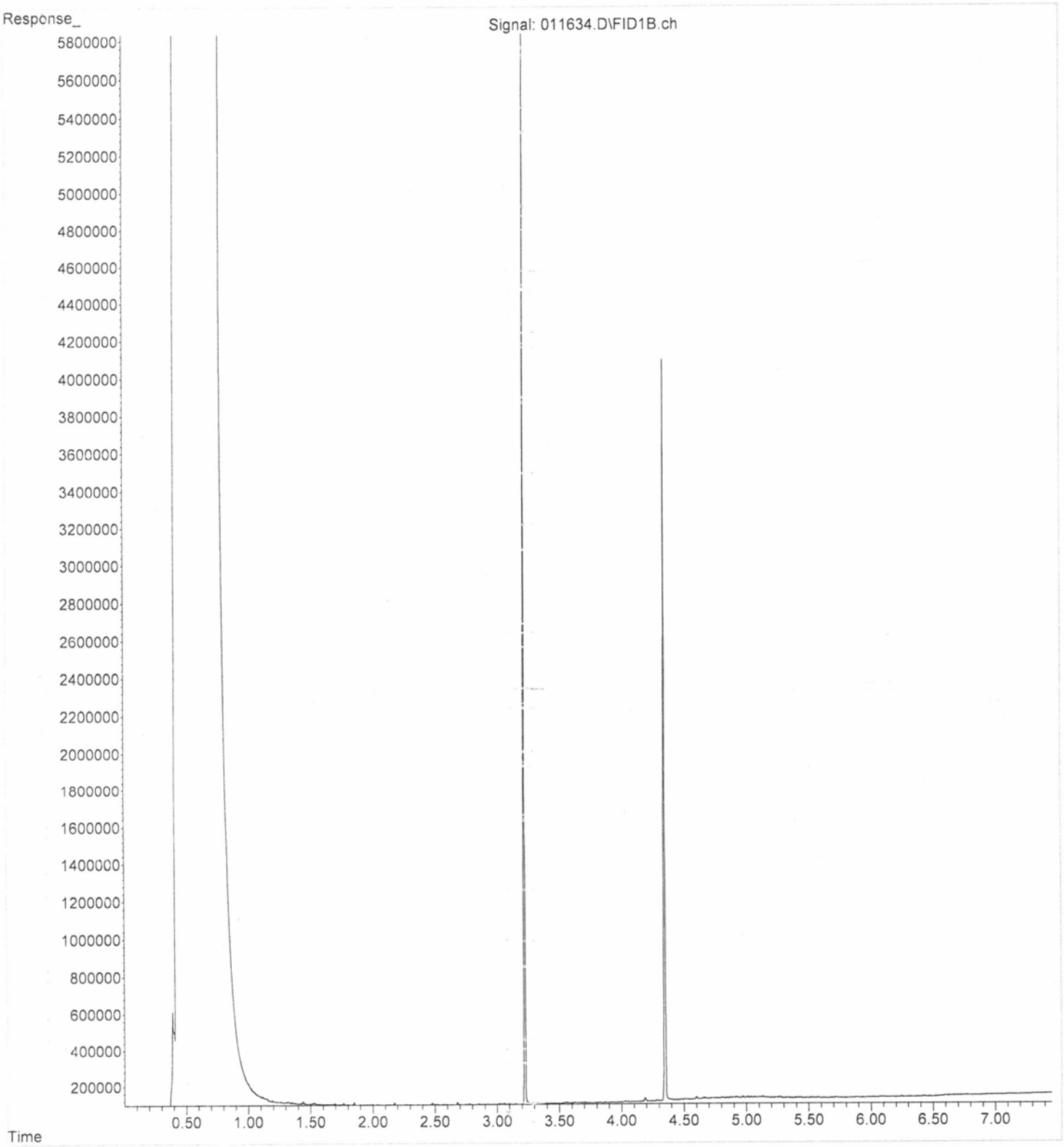
Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? ☒ NA ☐ YES ☐ NO

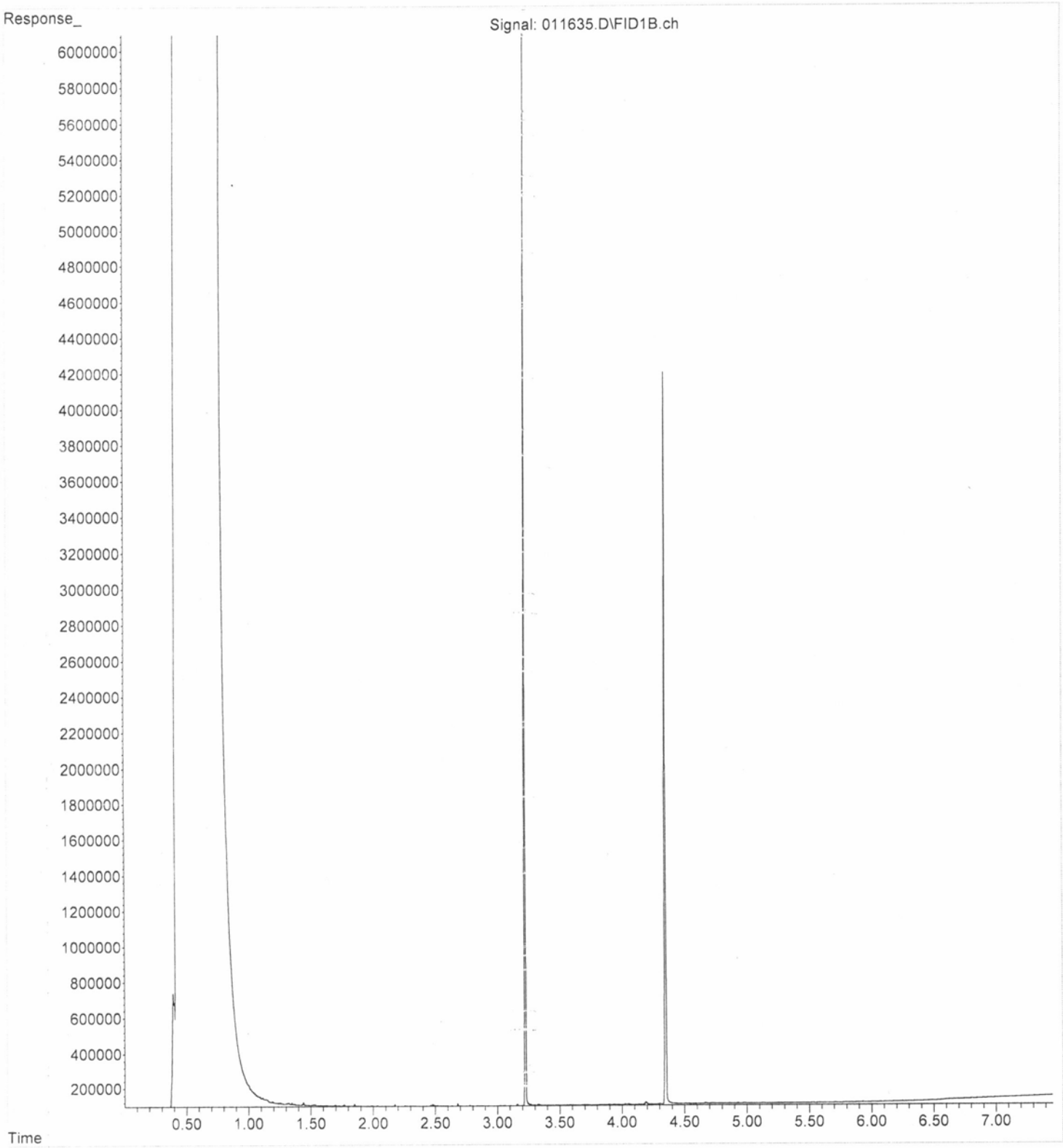
Number of unused TO15 canisters _____ **Number of unused TO17 tubes** _____

File :P:\Proc_GC13\01-16-25\011634.D
Operator : TL
Acquired : 16 Jan 2025 05:33 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501084-01
Misc Info :
Vial Number: 31

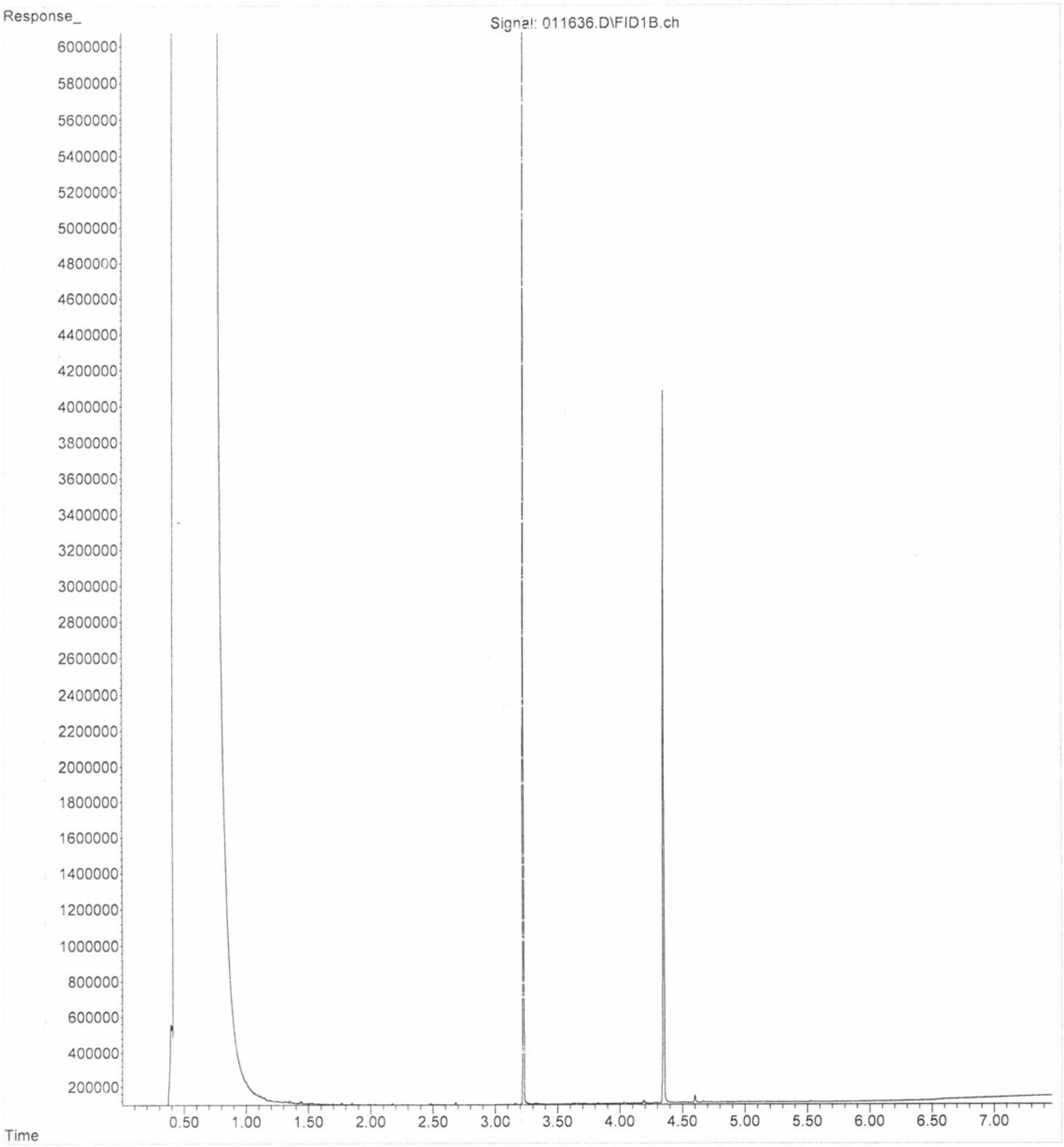
ERR



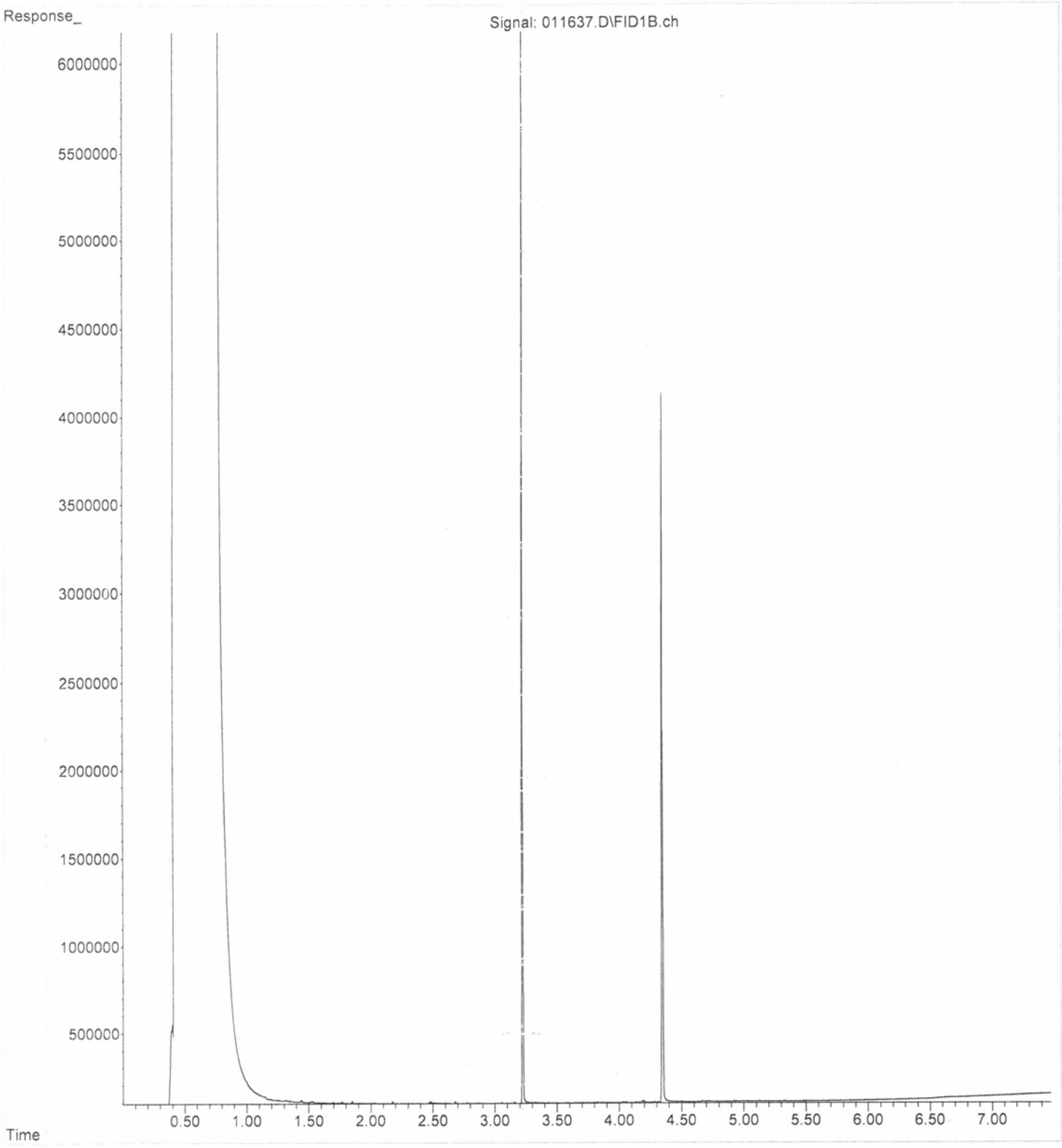
File :P:\Proc_GC13\01-16-25\011635.D
Operator : TL
Acquired : 16 Jan 2025 05:44 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501084-04
Misc Info : ERR
Vial Number: 32



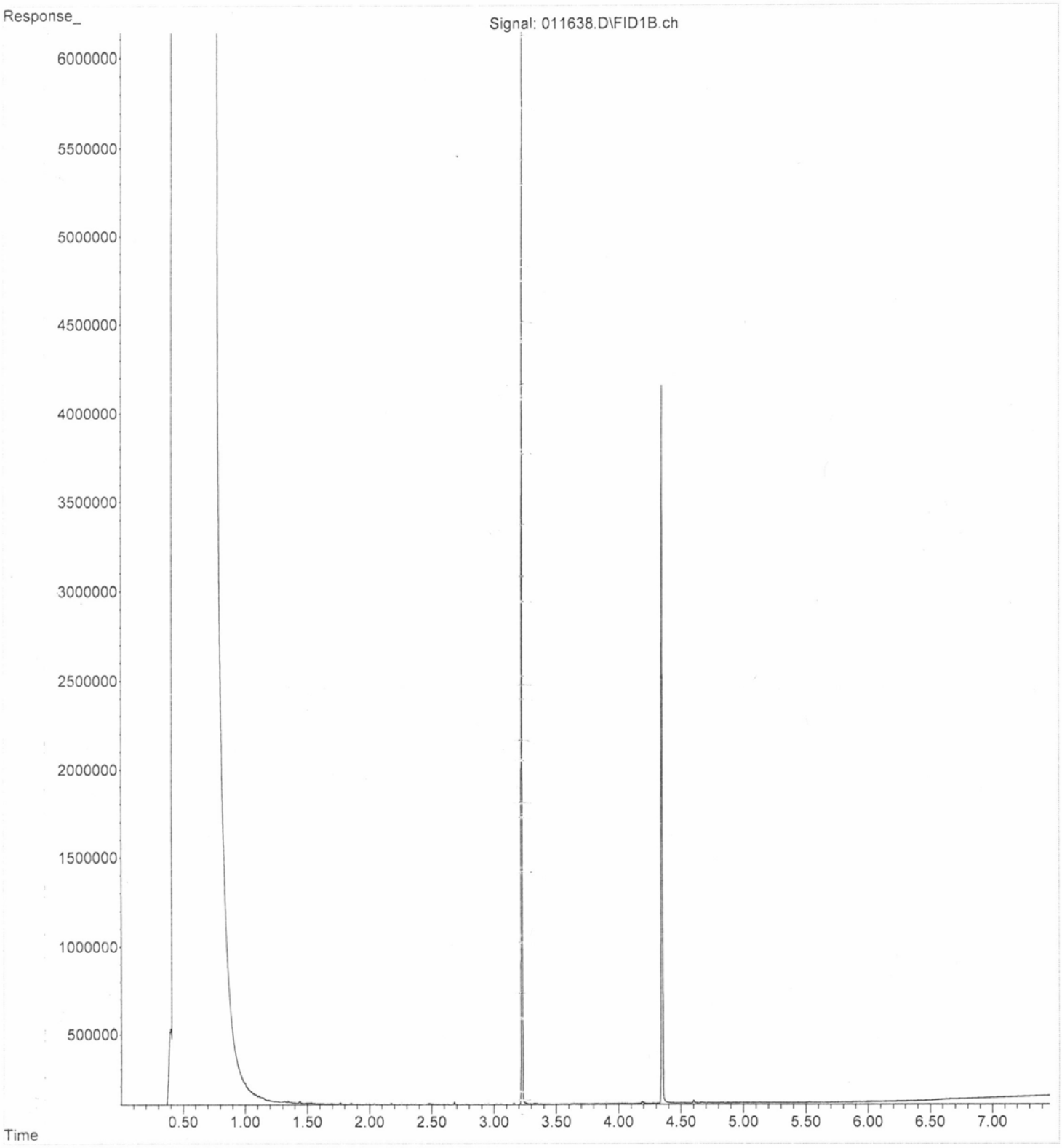
File :P:\Proc_GC13\01-16-25\011636.D
Operator : TL
Acquired : 16 Jan 2025 05:56 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501084-05
Misc Info : ERR
Vial Number: 33



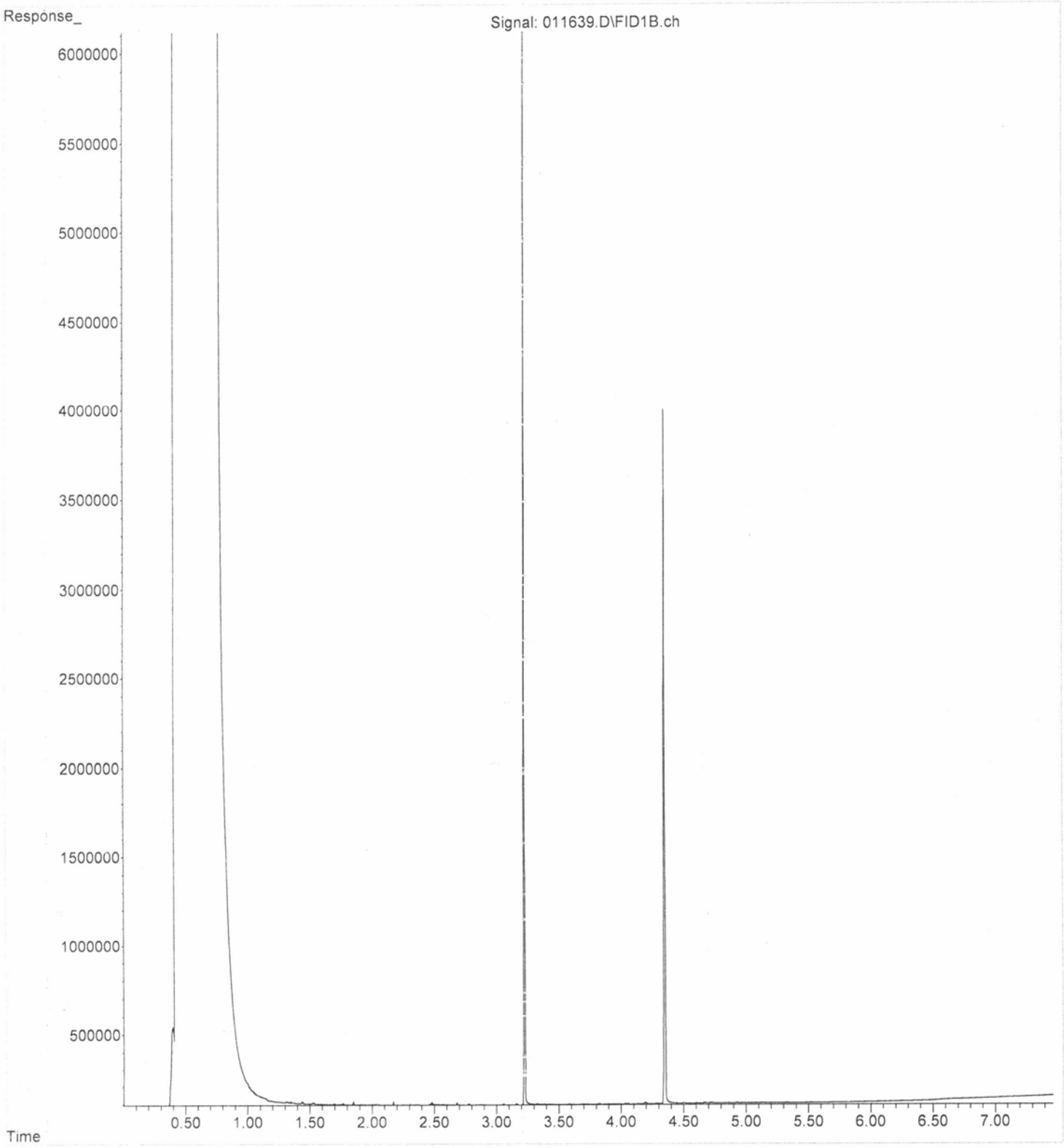
File :P:\Proc_GC13\01-16-25\011637.D
Operator : TL
Acquired : 16 Jan 2025 06:07 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501084-08
Misc Info : ERR
Vial Number: 34



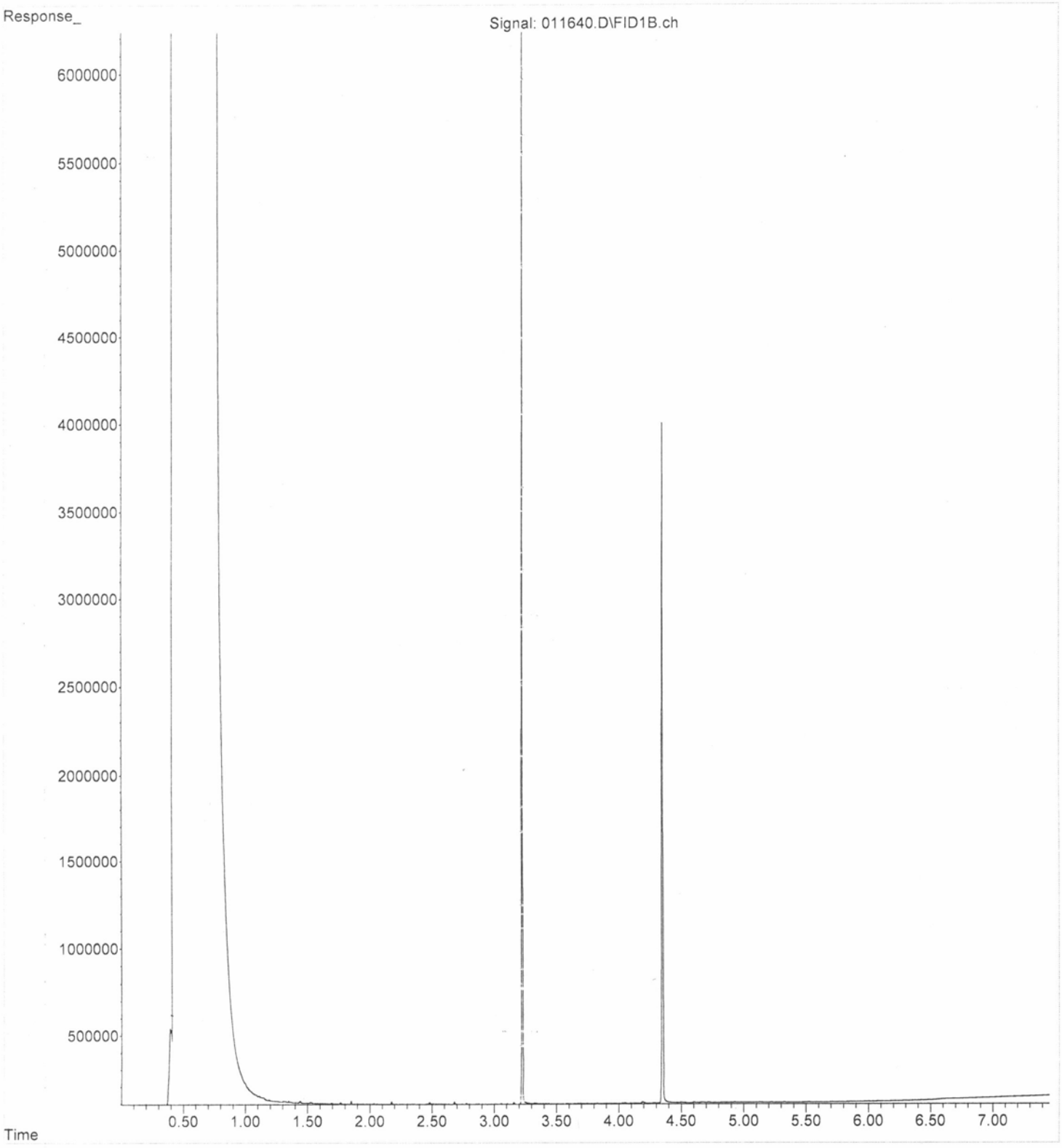
File :P:\Proc_GC13\01-16-25\011638.D
Operator : TL
Acquired : 16 Jan 2025 06:18 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501084-09
Misc Info : ERR
Vial Number: 35



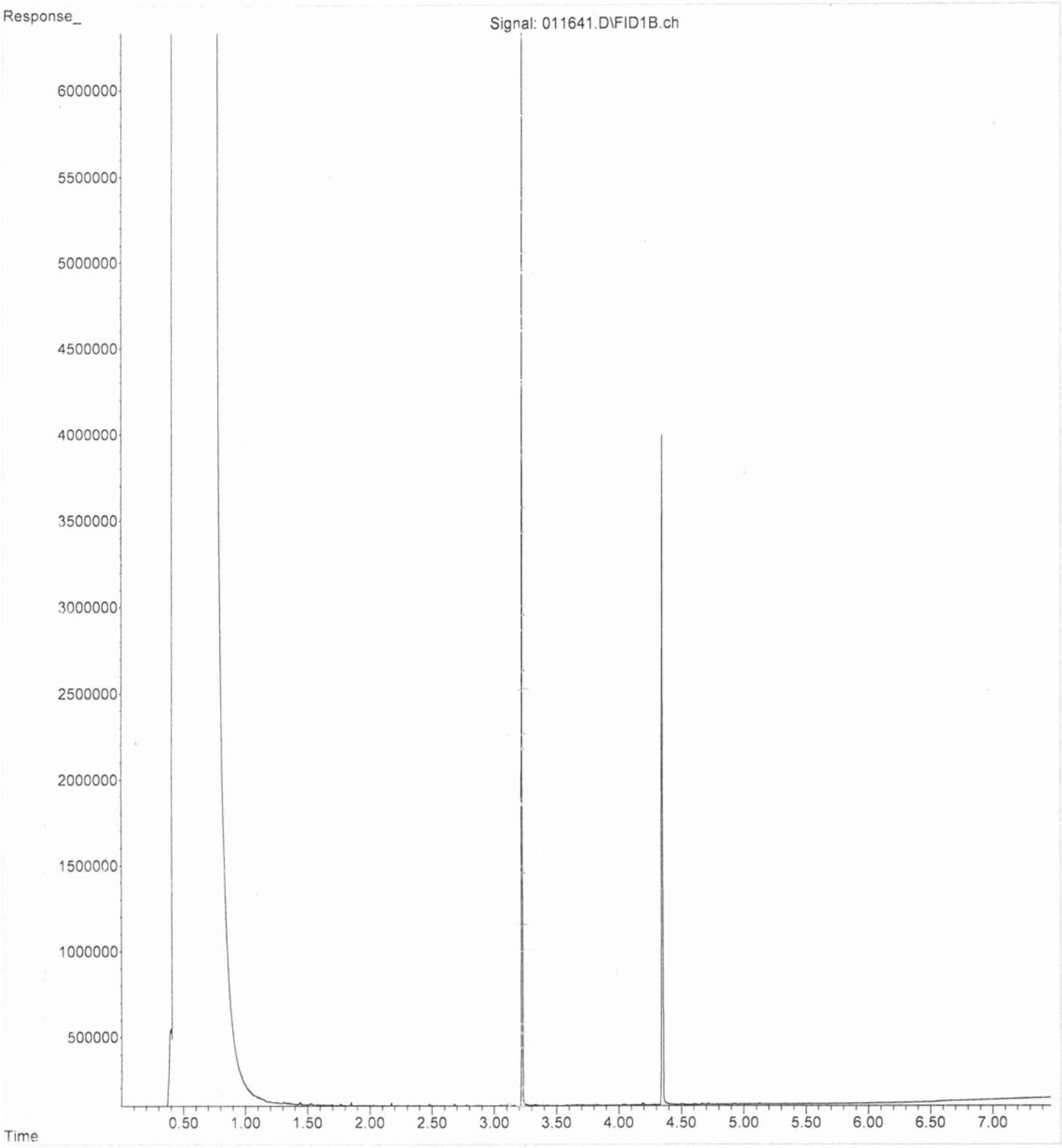
File :P:\Proc_GC13\01-16-25\011639.D
Operator : TL
Acquired : 16 Jan 2025 06:29 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501084-11
Misc Info : ERR
Vial Number: 36



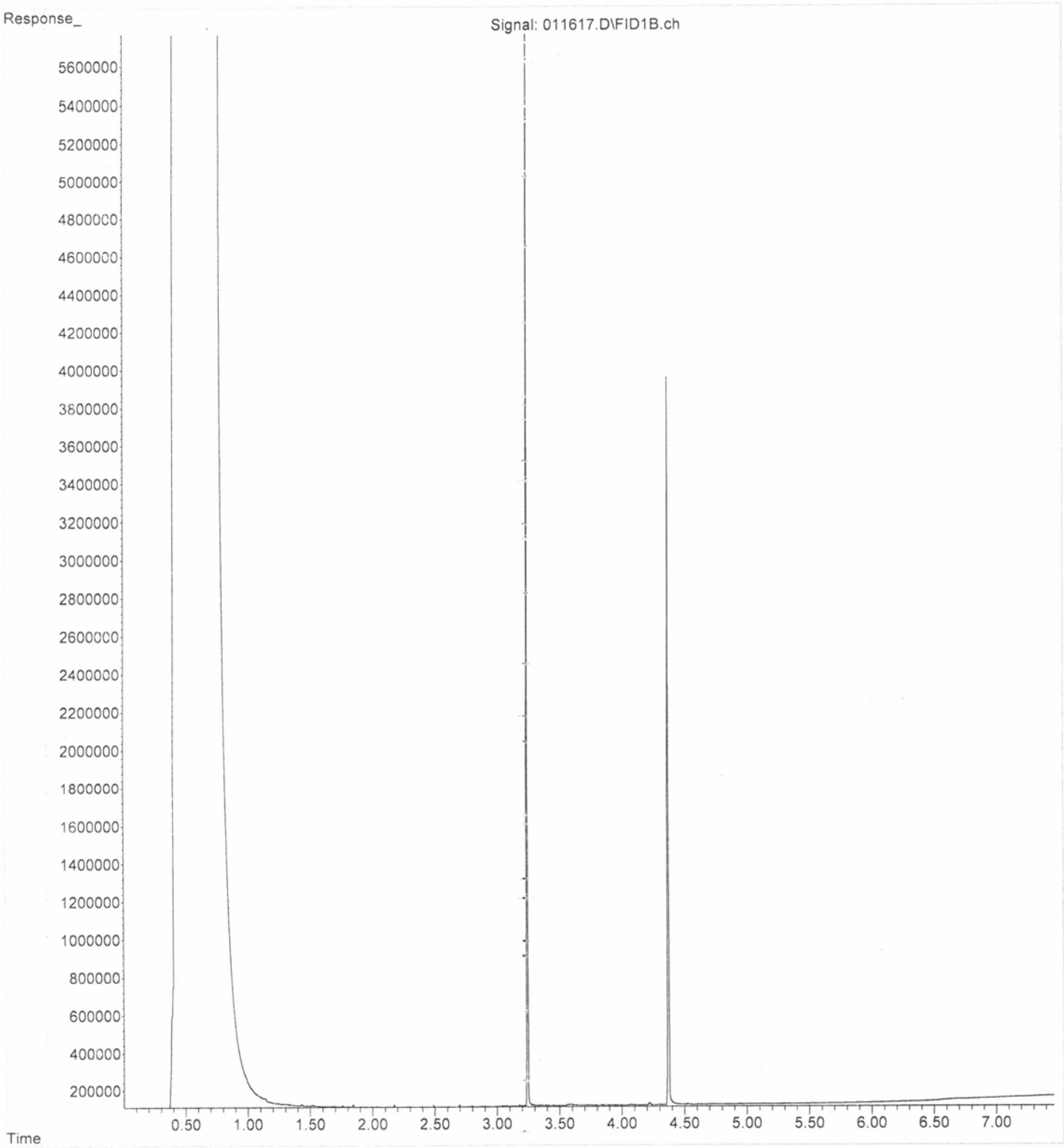
File :P:\Proc_GC13\01-16-25\011640.D
Operator : TL
Acquired : 16 Jan 2025 06:41 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501084-12
Misc Info : ERR
Vial Number: 37



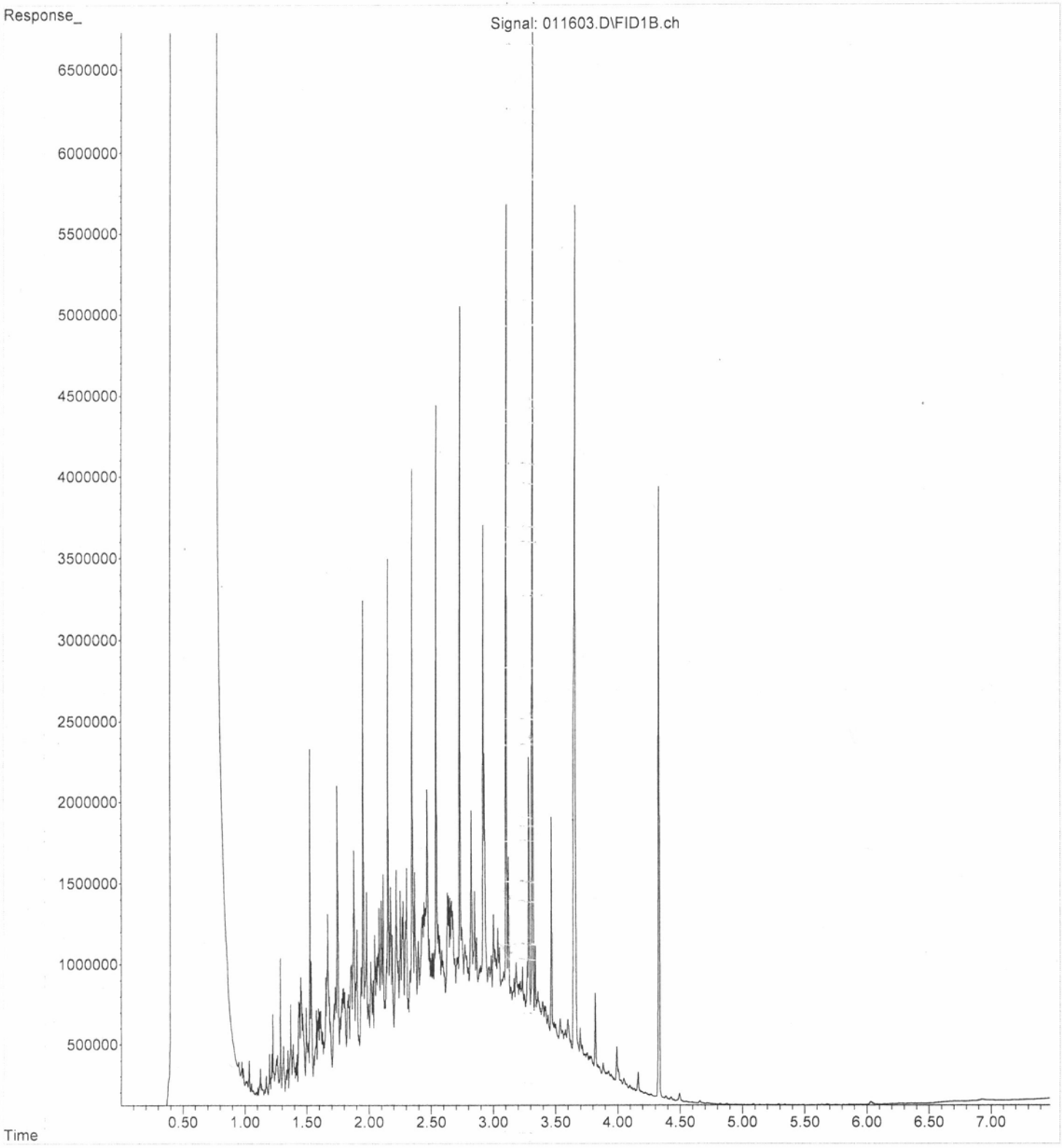
File :P:\Proc_GC13\01-16-25\011641.D
Operator : TL
Acquired : 16 Jan 2025 06:52 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501084-13
Misc Info : ERR
Vial Number: 38



File :P:\Proc_GC13\01-16-25\011617.D
Operator : TL
Acquired : 16 Jan 2025 02:22 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 05-199 mb
Misc Info : ERR
Vial Number: 16



File :P:\Proc_GC13\01-16-25\011603.D
Operator : TL
Acquired : 16 Jan 2025 08:17 am using AcqMethod Dx.M
Instrument : GC13
Sample Name: 500 Dx 74-61B
Misc Info : ERR
Vial Number: 3



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

January 21, 2025

Ali Cochrane, Project Manager
Aspect Consulting
710 2nd Ave S, Suite 550
Seattle, WA 98104

Dear Ms Cochrane:

Included are the results from the testing of material submitted on January 10, 2025 from the Mercy Housing AS220138B, F&BI 501132 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: Aspect Data, Hannah Cohen
ASP0121R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 10, 2025 by Friedman & Bruya, Inc. from the Aspect Consulting Mercy Housing AS220138B, F&BI 501132 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Aspect Consulting
501132 -01	AB-06-1.5
501132 -02	AB-06-4
501132 -03	AB-06-7
501132 -04	AB-06-9
501132 -05	AB-06-11.5
501132 -06	AB-06-14
501132 -07	AB-06-17
501132 -08	AB-06-19
501132 -09	AB-06-22
501132 -10	AB-06-28
501132 -11	AB-06-33
501132 -12	AB-06-37
501132 -13	AB-06-42
501132 -14	AB-06-48
501132 -15	AB-06-54.5
501132 -16	AB-06-57
501132 -17	AB-06-62
501132 -18	AB-06-67.5
501132 -19	AB-06-73
501132 -20	AB-06-79

Samples AB-06-4 and AB-06-9 were sent to NVL for asbestos testing. The report will be forwarded upon receipt.

The 8260D chloroethane and bromomethane calibration standard did not meet the acceptance criteria. The data were flagged accordingly.

The 8270E calibration standard did not meet the acceptance criteria for several compounds. The data were flagged accordingly.

All other quality control requirements were acceptable.

Date of Report: 01/21/25
Date Received: 01/10/25
Project: Mercy Housing AS220138B, F&BI 501132
Date Extracted: 01/15/25
Date Analyzed: 01/16/25

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)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
AB-06-1.5 501132-01	<5	122
AB-06-7 501132-03	<5	116
AB-06-11.5 501132-05	<5	121
AB-06-17 501132-07	<5	120
AB-06-19 501132-08	<5	109
AB-06-28 501132-10	<5	106
AB-06-33 501132-11	<5	109
AB-06-42 501132-13	<5	117
AB-06-48 501132-14	<5	111
AB-06-57 501132-16	<5	115

Date of Report: 01/21/25
Date Received: 01/10/25
Project: Mercy Housing AS220138B, F&BI 501132
Date Extracted: 01/15/25
Date Analyzed: 01/16/25

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)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
AB-06-67.5 501132-18	<5	116
AB-06-79 501132-20	<5	116
Method Blank 05-047 MB	<5	111

Date of Report: 01/21/25
Date Received: 01/10/25
Project: Mercy Housing AS220138B, F&BI 501132
Date Extracted: 01/16/25
Date Analyzed: 01/16/25

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)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
AB-06-1.5 501132-01	<50	<250	109
AB-06-7 501132-03	<50	<250	110
AB-06-11.5 501132-05	<50	<250	105
AB-06-17 501132-07	<50	<250	104
AB-06-19 501132-08	<50	<250	106
AB-06-28 501132-10	260 x	1,100	111
AB-06-33 501132-11	<50	<250	107
AB-06-42 501132-13	<50	<250	105
AB-06-48 501132-14	<50	<250	105
AB-06-57 501132-16	<50	<250	105
AB-06-67.5 501132-18	<50	<250	105

Date of Report: 01/21/25
Date Received: 01/10/25
Project: Mercy Housing AS220138B, F&BI 501132
Date Extracted: 01/16/25
Date Analyzed: 01/16/25

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)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
AB-06-79 501132-20	<50	<250	106
Method Blank 05-199 MB	<50	<250	104

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-06-1.5	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-01 1/0.5
Date Analyzed:	01/16/25	Data File:	011624.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	84	120
Toluene-d8	102	73	128
4-Bromofluorobenzene	102	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5 ca	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-06-7	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-03 1/0.5
Date Analyzed:	01/16/25	Data File:	011625.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	111	84	120
Toluene-d8	98	73	128
4-Bromofluorobenzene	97	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5 ca	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.0078	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-06-11.5	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-05 1/0.5
Date Analyzed:	01/16/25	Data File:	011626.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	84	120
Toluene-d8	102	73	128
4-Bromofluorobenzene	100	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5 ca	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.0034	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-06-17	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-07 1/0.5
Date Analyzed:	01/16/25	Data File:	011627.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	84	120
Toluene-d8	98	73	128
4-Bromofluorobenzene	102	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5 ca	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-06-19	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-08 1/0.5
Date Analyzed:	01/16/25	Data File:	011628.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	84	120
Toluene-d8	100	73	128
4-Bromofluorobenzene	101	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5 ca	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-06-28	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-10 1/0.5
Date Analyzed:	01/16/25	Data File:	011629.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	84	120
Toluene-d8	100	73	128
4-Bromofluorobenzene	100	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5 ca	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.0027	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-06-33	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-11 1/0.5
Date Analyzed:	01/16/25	Data File:	011630.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	84	120
Toluene-d8	98	73	128
4-Bromofluorobenzene	95	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5 ca	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	0.0058
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	0.0052
Hexane	<0.25	o-Xylene	0.0076
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	0.013	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.019	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	0.062
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-06-42	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-13 1/0.5
Date Analyzed:	01/16/25	Data File:	011631.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	84	120
Toluene-d8	99	73	128
4-Bromofluorobenzene	99	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5 ca	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-06-48	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-14 1/0.5
Date Analyzed:	01/16/25	Data File:	011632.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	84	120
Toluene-d8	100	73	128
4-Bromofluorobenzene	98	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5 ca	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-06-57	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-16 1/0.5
Date Analyzed:	01/16/25	Data File:	011633.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	84	120
Toluene-d8	100	73	128
4-Bromofluorobenzene	103	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5 ca	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-06-67.5	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-18 1/0.5
Date Analyzed:	01/16/25	Data File:	011634.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	84	120
Toluene-d8	103	73	128
4-Bromofluorobenzene	100	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5 ca	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-06-79	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-20 1/0.5
Date Analyzed:	01/16/25	Data File:	011635.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	84	120
Toluene-d8	99	73	128
4-Bromofluorobenzene	102	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5 ca	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	Method Blank	Client:	Aspect Consulting
Date Received:	Not Applicable	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	05-0156 mb 1/0.5
Date Analyzed:	01/16/25	Data File:	011623.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	84	120
Toluene-d8	100	73	128
4-Bromofluorobenzene	98	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5 ca	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-06-1.5	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-01 1/5
Date Analyzed:	01/16/25	Data File:	011620.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	76	22	119
Phenol-d6	81	38	124
Nitrobenzene-d5	80	10	198
2-Fluorobiphenyl	83	45	117
2,4,6-Tribromophenol	87	11	158
Terphenyl-d14	86	50	124

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5 ca
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	0.019
Benzoic acid	<2.5	Anthracene	0.0030
Bis(2-chloroethoxy)methane	<0.05	Carbazole	0.0028
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	0.055
Naphthalene	<0.005	Pyrene	0.043
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	0.024
4-Chloro-3-methylphenol	<0.5	Chrysene	0.030
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15 ca	Benzo(a)pyrene	0.031
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	0.042
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	0.015
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	0.018
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	0.020

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-06-7	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-03 1/25
Date Analyzed:	01/17/25	Data File:	011709.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	68 d	22	119
Phenol-d6	78 d	38	124
Nitrobenzene-d5	75 d	10	198
2-Fluorobiphenyl	85 d	45	117
2,4,6-Tribromophenol	87 d	11	158
Terphenyl-d14	92 d	50	124

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<2.5	Acenaphthylene	<0.012
Phenol	<1.2	2,6-Dinitrotoluene	<1.2
Bis(2-chloroethyl) ether	<0.25	3-Nitroaniline	<25
2-Chlorophenol	<2.5	Acenaphthene	0.76
1,3-Dichlorobenzene	<0.25	2,4-Dinitrophenol	<7.5 ca
1,4-Dichlorobenzene	<0.25	Dibenzofuran	0.36
1,2-Dichlorobenzene	<0.25	2,4-Dinitrotoluene	<1.2
Benzyl alcohol	<2.5	4-Nitrophenol	<7.5
2,2'-Oxybis(1-chloropropane)	<0.25	Diethyl phthalate	<2.5
2-Methylphenol	<2.5	Fluorene	0.54
Hexachloroethane	<0.25	4-Chlorophenyl phenyl ether	<0.25
N-Nitroso-di-n-propylamine	<0.25	N-Nitrosodiphenylamine	<0.25
3-Methylphenol + 4-Methylphenol	<5	4-Nitroaniline	<25 ca
Nitrobenzene	<0.25	4,6-Dinitro-2-methylphenol	<7.5 ca
Isophorone	<0.25	Hexachlorobenzene	<0.25
2-Nitrophenol	<2.5	Pentachlorophenol	<1.2
2,4-Dimethylphenol	<2.5	Phenanthrene	3.5
Benzoic acid	<12	Anthracene	0.99
Bis(2-chloroethoxy)methane	<0.25	Carbazole	0.40
2,4-Dichlorophenol	<2.5	Di-n-butyl phthalate	<2.5
1,2,4-Trichlorobenzene	<0.25	Fluoranthene	2.8
Naphthalene	0.23	Pyrene	2.4
Hexachlorobutadiene	<0.25	Benzyl butyl phthalate	<2.5
4-Chloroaniline	<25	Benz(a)anthracene	1.0
4-Chloro-3-methylphenol	<2.5	Chrysene	0.98
2-Methylnaphthalene	0.10	Bis(2-ethylhexyl) phthalate	<4
1-Methylnaphthalene	0.065	Di-n-octyl phthalate	<2.5
Hexachlorocyclopentadiene	<0.75 ca	Benzo(a)pyrene	0.88
2,4,6-Trichlorophenol	<2.5	Benzo(b)fluoranthene	0.94
2,4,5-Trichlorophenol	<2.5	Benzo(k)fluoranthene	0.38
2-Chloronaphthalene	<0.25	Indeno(1,2,3-cd)pyrene	0.42
2-Nitroaniline	<1.2	Dibenz(a,h)anthracene	0.085
Dimethyl phthalate	<2.5	Benzo(g,h,i)perylene	0.45

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-06-11.5	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-05 1/5
Date Analyzed:	01/17/25	Data File:	011707.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	65	14	115
Phenol-d6	73	29	121
Nitrobenzene-d5	88	16	137
2-Fluorobiphenyl	81	46	122
2,4,6-Tribromophenol	72	17	154
Terphenyl-d14	75	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	0.0030
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	0.048
Benzoic acid	<2.5	Anthracene	0.0048
Bis(2-chloroethoxy)methane	<0.05	Carbazole	0.0030
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	0.059
Naphthalene	<0.005	Pyrene	0.071
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	0.028
4-Chloro-3-methylphenol	<0.5	Chrysene	0.040
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	0.034
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	0.038
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	0.014
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	0.016
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	0.019

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-06-17	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-07 1/5
Date Analyzed:	01/17/25	Data File:	011708.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	70	14	115
Phenol-d6	79	29	121
Nitrobenzene-d5	91	16	137
2-Fluorobiphenyl	83	46	122
2,4,6-Tribromophenol	81	17	154
Terphenyl-d14	78	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-06-19	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-08 1/5
Date Analyzed:	01/17/25	Data File:	011709.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	67	14	115
Phenol-d6	79	29	121
Nitrobenzene-d5	92	16	137
2-Fluorobiphenyl	82	46	122
2,4,6-Tribromophenol	77	17	154
Terphenyl-d14	81	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-06-28	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-10 1/100
Date Analyzed:	01/17/25	Data File:	011710.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	56 d	22	119
Phenol-d6	72 d	38	124
Nitrobenzene-d5	66 d	10	198
2-Fluorobiphenyl	86 d	45	117
2,4,6-Tribromophenol	99 d	11	158
Terphenyl-d14	94 d	50	124

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<10	Acenaphthylene	<0.05
Phenol	<5	2,6-Dinitrotoluene	<5
Bis(2-chloroethyl) ether	<1	3-Nitroaniline	<100
2-Chlorophenol	<10	Acenaphthene	0.076
1,3-Dichlorobenzene	<1	2,4-Dinitrophenol	<30 ca
1,4-Dichlorobenzene	<1	Dibenzofuran	<0.05
1,2-Dichlorobenzene	<1	2,4-Dinitrotoluene	<5
Benzyl alcohol	<10	4-Nitrophenol	<30
2,2'-Oxybis(1-chloropropane)	<1	Diethyl phthalate	<10
2-Methylphenol	<10	Fluorene	0.062
Hexachloroethane	<1	4-Chlorophenyl phenyl ether	<1
N-Nitroso-di-n-propylamine	<1	N-Nitrosodiphenylamine	<1
3-Methylphenol + 4-Methylphenol	<20	4-Nitroaniline	<100 ca
Nitrobenzene	<1	4,6-Dinitro-2-methylphenol	<30 ca
Isophorone	<1	Hexachlorobenzene	<1
2-Nitrophenol	<10	Pentachlorophenol	<5
2,4-Dimethylphenol	<10	Phenanthrene	0.61
Benzoic acid	<50	Anthracene	0.11
Bis(2-chloroethoxy)methane	<1	Carbazole	0.057
2,4-Dichlorophenol	<10	Di-n-butyl phthalate	<10
1,2,4-Trichlorobenzene	<1	Fluoranthene	0.41
Naphthalene	<0.1	Pyrene	0.42
Hexachlorobutadiene	<1	Benzyl butyl phthalate	<10
4-Chloroaniline	<100	Benz(a)anthracene	0.17
4-Chloro-3-methylphenol	<10	Chrysene	0.18
2-Methylnaphthalene	<0.05	Bis(2-ethylhexyl) phthalate	<16
1-Methylnaphthalene	<0.05	Di-n-octyl phthalate	<10
Hexachlorocyclopentadiene	<3 ca	Benzo(a)pyrene	0.16
2,4,6-Trichlorophenol	<10	Benzo(b)fluoranthene	0.16
2,4,5-Trichlorophenol	<10	Benzo(k)fluoranthene	0.054
2-Chloronaphthalene	<1	Indeno(1,2,3-cd)pyrene	<0.1
2-Nitroaniline	<5	Dibenz(a,h)anthracene	<0.1
Dimethyl phthalate	<10	Benzo(g,h,i)perylene	0.15

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-06-33	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-11 1/5
Date Analyzed:	01/17/25	Data File:	011710.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	72	14	115
Phenol-d6	81	29	121
Nitrobenzene-d5	81	16	137
2-Fluorobiphenyl	81	46	122
2,4,6-Tribromophenol	80	17	154
Terphenyl-d14	71	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	0.028
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	0.026
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	0.033
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	0.13
Benzoic acid	<2.5	Anthracene	0.013
Bis(2-chloroethoxy)methane	<0.05	Carbazole	0.0047
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	0.071
Naphthalene	0.016	Pyrene	0.040
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	0.0099
4-Chloro-3-methylphenol	<0.5	Chrysene	0.013
2-Methylnaphthalene	0.018	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	0.012	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	0.0034
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	0.0089
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-06-42	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-13 1/5
Date Analyzed:	01/17/25	Data File:	011713.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	73	14	115
Phenol-d6	83	29	121
Nitrobenzene-d5	100	16	137
2-Fluorobiphenyl	85	46	122
2,4,6-Tribromophenol	85	17	154
Terphenyl-d14	79	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-06-48	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-14 1/5
Date Analyzed:	01/17/25	Data File:	011714.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	71	14	115
Phenol-d6	80	29	121
Nitrobenzene-d5	90	16	137
2-Fluorobiphenyl	83	46	122
2,4,6-Tribromophenol	81	17	154
Terphenyl-d14	78	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-06-57	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-16 1/5
Date Analyzed:	01/17/25	Data File:	011715.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	71	14	115
Phenol-d6	79	29	121
Nitrobenzene-d5	91	16	137
2-Fluorobiphenyl	81	46	122
2,4,6-Tribromophenol	75	17	154
Terphenyl-d14	74	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-06-67.5	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-18 1/5
Date Analyzed:	01/17/25	Data File:	011716.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	71	14	115
Phenol-d6	79	29	121
Nitrobenzene-d5	88	16	137
2-Fluorobiphenyl	81	46	122
2,4,6-Tribromophenol	77	17	154
Terphenyl-d14	74	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-06-79	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	501132-20 1/5
Date Analyzed:	01/17/25	Data File:	011717.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	69	14	115
Phenol-d6	76	29	121
Nitrobenzene-d5	85	16	137
2-Fluorobiphenyl	82	46	122
2,4,6-Tribromophenol	75	17	154
Terphenyl-d14	73	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	Aspect Consulting
Date Received:	Not Applicable	Project:	Mercy Housing AS220138B
Date Extracted:	01/16/25	Lab ID:	05-0203 mb 1/5
Date Analyzed:	01/16/25	Data File:	011619.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	86	22	119
Phenol-d6	93	38	124
Nitrobenzene-d5	93	10	198
2-Fluorobiphenyl	97	45	117
2,4,6-Tribromophenol	96	11	158
Terphenyl-d14	101	50	124

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5 ca
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15 ca	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-06-1.5	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501132-01
Date Analyzed:	01/16/25	Data File:	501132-01.071
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.9
Barium	46
Cadmium	<1
Chromium	13
Lead	17
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-06-7	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501132-03
Date Analyzed:	01/16/25	Data File:	501132-03.072
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.6
Barium	53
Cadmium	<1
Chromium	20
Lead	19
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-06-11.5	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501132-05
Date Analyzed:	01/16/25	Data File:	501132-05.073
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.3
Barium	64
Cadmium	<1
Chromium	15
Lead	11
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-06-17	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501132-07
Date Analyzed:	01/16/25	Data File:	501132-07.076
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.7
Barium	38
Cadmium	<1
Chromium	15
Lead	2.5
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-06-19	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501132-08
Date Analyzed:	01/16/25	Data File:	501132-08.077
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.3
Barium	29
Cadmium	<1
Chromium	10
Lead	2.2
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-06-28	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501132-10
Date Analyzed:	01/16/25	Data File:	501132-10.078
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.2
Barium	62
Cadmium	<1
Chromium	12
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-06-28	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501132-10 x5
Date Analyzed:	01/16/25	Data File:	501132-10 x5.226
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Lead	43

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-06-33	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501132-11
Date Analyzed:	01/16/25	Data File:	501132-11.079
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.0
Barium	110
Cadmium	<1
Lead	4.2
Mercury	1.6
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-06-33	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501132-11 x5
Date Analyzed:	01/16/25	Data File:	501132-11 x5.227
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Chromium	33

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-06-42	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501132-13
Date Analyzed:	01/16/25	Data File:	501132-13.080
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.1
Barium	29
Cadmium	<1
Chromium	12
Lead	1.6
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-06-48	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501132-14
Date Analyzed:	01/16/25	Data File:	501132-14.081
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.0
Barium	33
Cadmium	<1
Chromium	12
Lead	1.8
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-06-57	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501132-16
Date Analyzed:	01/16/25	Data File:	501132-16.082
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.4
Barium	42
Cadmium	<1
Chromium	13
Lead	2.0
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-06-67.5	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501132-18
Date Analyzed:	01/16/25	Data File:	501132-18.083
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.1
Barium	38
Cadmium	<1
Chromium	9.9
Lead	1.7
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-06-79	Client:	Aspect Consulting
Date Received:	01/10/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	501132-20
Date Analyzed:	01/16/25	Data File:	501132-20.084
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.3
Barium	28
Cadmium	<1
Chromium	13
Lead	1.6
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Aspect Consulting
Date Received:	NA	Project:	Mercy Housing AS220138B
Date Extracted:	01/15/25	Lab ID:	I5-37 mb
Date Analyzed:	01/15/25	Data File:	I5-37 mb.161
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Date of Report: 01/21/25
Date Received: 01/10/25
Project: Mercy Housing AS220138B, F&BI 501132

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TPH AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code: 501138-01 (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)	40	70	70-130

Date of Report: 01/21/25
Date Received: 01/10/25
Project: Mercy Housing AS220138B, F&BI 501132

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 501132-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	110	114	64-136	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	110	78-121

Date of Report: 01/21/25
Date Received: 01/10/25
Project: Mercy Housing AS220138B, F&BI 501132

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 501203-04 (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	<0.5	33	32	10-47	3
Chloromethane	mg/kg (ppm)	2	<0.5	55	52	10-88	6
Vinyl chloride	mg/kg (ppm)	2	<0.05	61	57	10-79	7
Bromomethane	mg/kg (ppm)	2	<0.5	46	45	10-85	2
Chloroethane	mg/kg (ppm)	2	<0.5	51	49	11-106	4
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	64	53	10-85	19
Acetone	mg/kg (ppm)	10	<5	66	62	10-224	6
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	75	69	11-105	8
Hexane	mg/kg (ppm)	2	<0.25	67	60	10-106	11
Methylene chloride	mg/kg (ppm)	2	<0.5	67	63	10-139	6
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	81	76	18-131	6
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	80	75	16-122	6
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	75	70	19-125	7
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	74	68	10-184	8
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	79	74	18-129	7
Chloroform	mg/kg (ppm)	2	<0.05	73	69	18-126	6
2-Butanone (MEK)	mg/kg (ppm)	10	<1	69	65	10-190	6
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	69	65	19-138	6
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	74	69	16-126	7
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	81	73	19-129	10
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	73	69	13-125	6
Benzene	mg/kg (ppm)	2	<0.03	82	76	15-129	8
Trichloroethene	mg/kg (ppm)	2	<0.02	83	79	14-127	5
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	81	74	17-137	9
Bromodichloromethane	mg/kg (ppm)	2	<0.05	76	72	24-130	5
Dibromomethane	mg/kg (ppm)	2	<0.05	79	75	20-138	5
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	84	81	21-139	4
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	82	75	17-135	9
Toluene	mg/kg (ppm)	2	<0.05	86	81	15-129	6
trans-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	80	77	18-130	4
1,1,2-Trichloroethane	mg/kg (ppm)	2	<0.05	81	77	29-128	5
2-Hexanone	mg/kg (ppm)	10	<1	67	69	28-142	3
1,3-Dichloropropane	mg/kg (ppm)	2	<0.05	80	77	20-135	4
Tetrachloroethene	mg/kg (ppm)	2	<0.025	83	78	20-121	6
Dibromochloromethane	mg/kg (ppm)	2	<0.05	79	77	11-138	3
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	80	77	21-130	4
Chlorobenzene	mg/kg (ppm)	2	<0.05	82	78	19-129	5
Ethylbenzene	mg/kg (ppm)	2	<0.05	83	79	23-133	5
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	81	75	16-127	8
m,p-Xylene	mg/kg (ppm)	4	<0.1	84	79	19-134	6
o-Xylene	mg/kg (ppm)	2	<0.05	84	80	20-132	5
Styrene	mg/kg (ppm)	2	<0.05	87	84	23-127	4
Isopropylbenzene	mg/kg (ppm)	2	<0.05	94	89	21-134	5
Bromoform	mg/kg (ppm)	2	<0.05	78	77	10-142	1
n-Propylbenzene	mg/kg (ppm)	2	<0.05	84	80	10-141	5
Bromobenzene	mg/kg (ppm)	2	<0.05	84	79	10-135	6
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	84	79	20-136	6
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	80	74	10-234	8
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	75	71	10-144	5
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	83	78	10-139	6
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	82	77	10-139	6
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	84	79	10-144	6
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	0.042	86	80	24-133	7
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	86	81	23-134	6
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	87	83	25-131	5
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	86	78	10-143	10
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	85	78	10-146	9
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	86	79	10-144	8
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	74	70	10-163	6
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	89	81	10-147	9
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	89	80	10-162	11
Naphthalene	mg/kg (ppm)	2	<0.05	91	82	30-138	10
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	88	80	10-173	10

Date of Report: 01/21/25
Date Received: 01/10/25
Project: Mercy Housing AS220138B, F&BI 501132

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2	59	10-93
Chloromethane	mg/kg (ppm)	2	75	34-101
Vinyl chloride	mg/kg (ppm)	2	73	47-106
Bromomethane	mg/kg (ppm)	2	56	38-123
Chloroethane	mg/kg (ppm)	2	55	44-123
Trichlorofluoromethane	mg/kg (ppm)	2	80	56-108
Acetone	mg/kg (ppm)	10	85	24-185
1,1-Dichloroethene	mg/kg (ppm)	2	99	61-118
Hexane	mg/kg (ppm)	2	89	54-142
Methylene chloride	mg/kg (ppm)	2	91	10-213
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	86	70-130
trans-1,2-Dichloroethene	mg/kg (ppm)	2	98	70-130
1,1-Dichloroethane	mg/kg (ppm)	2	89	70-130
2,2-Dichloropropane	mg/kg (ppm)	2	87	45-172
cis-1,2-Dichloroethene	mg/kg (ppm)	2	91	70-130
Chloroform	mg/kg (ppm)	2	85	70-130
2-Butanone (MEK)	mg/kg (ppm)	10	84	36-182
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	81	66-140
1,1,1-Trichloroethane	mg/kg (ppm)	2	88	70-130
1,1-Dichloropropene	mg/kg (ppm)	2	94	70-130
Carbon tetrachloride	mg/kg (ppm)	2	90	68-146
Benzene	mg/kg (ppm)	2	95	70-130
Trichloroethene	mg/kg (ppm)	2	98	53-133
1,2-Dichloropropane	mg/kg (ppm)	2	94	67-137
Bromodichloromethane	mg/kg (ppm)	2	88	70-130
Dibromomethane	mg/kg (ppm)	2	92	70-130
4-Methyl-2-pentanone	mg/kg (ppm)	10	94	70-130
cis-1,3-Dichloropropene	mg/kg (ppm)	2	94	70-130
Toluene	mg/kg (ppm)	2	99	63-127
trans-1,3-Dichloropropene	mg/kg (ppm)	2	93	70-130
1,1,2-Trichloroethane	mg/kg (ppm)	2	92	70-130
2-Hexanone	mg/kg (ppm)	10	86	65-148
1,3-Dichloropropane	mg/kg (ppm)	2	90	67-135
Tetrachloroethene	mg/kg (ppm)	2	100	59-138
Dibromochloromethane	mg/kg (ppm)	2	92	61-154
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	92	70-130
Chlorobenzene	mg/kg (ppm)	2	98	65-133
Ethylbenzene	mg/kg (ppm)	2	97	60-140
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	91	68-129
m,p-Xylene	mg/kg (ppm)	4	99	56-145
o-Xylene	mg/kg (ppm)	2	97	61-137
Styrene	mg/kg (ppm)	2	101	61-138
Isopropylbenzene	mg/kg (ppm)	2	108	52-148
Bromoform	mg/kg (ppm)	2	89	57-166
n-Propylbenzene	mg/kg (ppm)	2	98	36-162
Bromobenzene	mg/kg (ppm)	2	96	63-127
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	97	43-156
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	89	35-184
1,2,3-Trichloropropane	mg/kg (ppm)	2	83	70-130
2-Chlorotoluene	mg/kg (ppm)	2	93	50-146
4-Chlorotoluene	mg/kg (ppm)	2	94	47-150
tert-Butylbenzene	mg/kg (ppm)	2	95	41-154
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	98	42-159
sec-Butylbenzene	mg/kg (ppm)	2	98	25-175
p-Isopropyltoluene	mg/kg (ppm)	2	99	18-186
1,3-Dichlorobenzene	mg/kg (ppm)	2	97	49-149
1,4-Dichlorobenzene	mg/kg (ppm)	2	96	48-149
1,2-Dichlorobenzene	mg/kg (ppm)	2	97	58-139
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	85	70-130
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	98	39-166
Hexachlorobutadiene	mg/kg (ppm)	2	98	41-186
Naphthalene	mg/kg (ppm)	2	98	67-143
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	99	49-165

Date of Report: 01/21/25
Date Received: 01/10/25
Project: Mercy Housing AS220138B, F&BI 501132

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270E

Laboratory Code: 501132-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Pyridine	mg/kg (ppm)	0.83	<0.5	65	57	10-108	13
Phenol	mg/kg (ppm)	0.83	<0.25	83	81	36-118	2
Bis(2-chloroethyl) ether	mg/kg (ppm)	0.83	<0.05	78	80	24-116	3
2-Chlorophenol	mg/kg (ppm)	0.83	<0.5	84	81	24-125	4
1,3-Dichlorobenzene	mg/kg (ppm)	0.83	<0.05	79	76	17-116	4
1,4-Dichlorobenzene	mg/kg (ppm)	0.83	<0.05	80	77	18-118	4
1,2-Dichlorobenzene	mg/kg (ppm)	0.83	<0.05	80	77	22-117	4
Benzyl alcohol	mg/kg (ppm)	4.2	<0.5	82	81	36-121	1
2,2'-Oxybis(1-chloropropane)	mg/kg (ppm)	0.83	<0.05	83	82	20-126	1
2-Methylphenol	mg/kg (ppm)	0.83	<0.5	84	82	38-120	2
Hexachloroethane	mg/kg (ppm)	0.83	<0.05	81	82	10-207	1
N-Nitroso-di-n-propylamine	mg/kg (ppm)	0.83	<0.05	90	88	10-176	2
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	0.83	<1	83	85	39-121	2
Nitrobenzene	mg/kg (ppm)	0.83	<0.05	65	66	10-186	2
Isophorone	mg/kg (ppm)	0.83	<0.05	85	87	29-155	2
2-Nitrophenol	mg/kg (ppm)	0.83	<0.5	83	89	16-148	7
2,4-Dimethylphenol	mg/kg (ppm)	0.83	<0.5	80	83	17-130	4
Benzoic acid	mg/kg (ppm)	2.5	<2.5	61	67	10-101	9
Bis(2-chloroethoxy)methane	mg/kg (ppm)	0.83	<0.05	81	84	37-121	4
2,4-Dichlorophenol	mg/kg (ppm)	0.83	<0.5	85	88	19-144	3
1,2,4-Trichlorobenzene	mg/kg (ppm)	0.83	<0.05	81	82	35-116	1
Naphthalene	mg/kg (ppm)	0.83	<0.005	81	82	28-125	1
Hexachlorobutadiene	mg/kg (ppm)	0.83	<0.05	81	79	25-126	2
4-Chloroaniline	mg/kg (ppm)	6.8	<5	75	78	21-117	4
4-Chloro-3-methylphenol	mg/kg (ppm)	0.83	<0.5	92	93	36-138	1
2-Methylnaphthalene	mg/kg (ppm)	0.83	<0.0025	88	89	10-192	1
1-Methylnaphthalene	mg/kg (ppm)	0.83	<0.0025	88	88	10-163	0
Hexachlorocyclopentadiene	mg/kg (ppm)	0.83	<0.15	85	85	10-136	0
2,4,6-Trichlorophenol	mg/kg (ppm)	0.83	<0.5	88	88	16-151	0
2,4,5-Trichlorophenol	mg/kg (ppm)	0.83	<0.5	94	93	20-139	1
2-Chloronaphthalene	mg/kg (ppm)	0.83	<0.05	84	83	42-117	1
2-Nitroaniline	mg/kg (ppm)	4.2	<0.25	70	71	50-150	1
Dimethyl phthalate	mg/kg (ppm)	0.83	<0.5	93	88	50-150	6
Acenaphthylene	mg/kg (ppm)	0.83	<0.0025	89	89	45-128	0
2,6-Dinitrotoluene	mg/kg (ppm)	0.83	<0.25	96	93	11-182	3
3-Nitroaniline	mg/kg (ppm)	4.2	<5	75	84	36-110	11
Acenaphthene	mg/kg (ppm)	0.83	<0.0025	90	86	36-125	5
2,4-Dinitrophenol	mg/kg (ppm)	1.7	<1.5	86	86	10-135	0
Dibenzofuran	mg/kg (ppm)	0.83	<0.0025	94	90	44-125	4
2,4-Dinitrotoluene	mg/kg (ppm)	0.83	<0.25	102	103	37-149	1
4-Nitrophenol	mg/kg (ppm)	1.7	<1.5	96	95	24-159	1
Diethyl phthalate	mg/kg (ppm)	0.83	<0.5	95	92	48-126	3
Fluorene	mg/kg (ppm)	0.83	<0.0025	94	92	48-121	2
4-Chlorophenyl phenyl ether	mg/kg (ppm)	0.83	<0.05	93	89	50-150	4
N-Nitrosodiphenylamine	mg/kg (ppm)	0.83	<0.05	88	88	10-190	0
4-Nitroaniline	mg/kg (ppm)	4.2	<5	81	86	10-150	6
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	0.83	<1.5	103	104	10-148	1
Hexachlorobenzene	mg/kg (ppm)	0.83	<0.05	78	77	50-150	1
Pentachlorophenol	mg/kg (ppm)	0.83	<0.25	95	99	18-159	4
Phenanthrene	mg/kg (ppm)	0.83	0.016	95	95	46-122	0
Anthracene	mg/kg (ppm)	0.83	0.0026	96	96	30-144	0
Carbazole	mg/kg (ppm)	0.83	0.0023	91	92	50-150	1
Di-n-butyl phthalate	mg/kg (ppm)	0.83	<0.5	101	98	43-124	3
Fluoranthene	mg/kg (ppm)	0.83	0.046	99	98	50-150	1
Pyrene	mg/kg (ppm)	0.83	0.036	89	88	40-134	1
Benzyl butyl phthalate	mg/kg (ppm)	0.83	<0.5	93	94	14-187	1
Benz(a)anthracene	mg/kg (ppm)	0.83	0.020	92	91	50-150	1
Chrysene	mg/kg (ppm)	0.83	0.025	88	88	50-150	0
Bis(2-ethylhexyl) phthalate	mg/kg (ppm)	0.83	<0.8	95	94	45-130	1
Di-n-octyl phthalate	mg/kg (ppm)	0.83	<0.5	104	108	25-161	4
Benzo(a)pyrene	mg/kg (ppm)	0.83	0.026	95	93	50-150	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	0.035	96	95	50-150	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	0.013	95	94	50-150	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	0.015	82	81	40-140	1
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	<0.005	85	84	41-136	1
Benzo(g,h,i)perylene	mg/kg (ppm)	0.83	<0.03	79	76	29-139	4

Date of Report: 01/21/25
Date Received: 01/10/25
Project: Mercy Housing AS220138B, F&BI 501132

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270E

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Pyridine	mg/kg (ppm)	0.83	57	20-82
Phenol	mg/kg (ppm)	0.83	89	47-128
Bis(2-chloroethyl) ether	mg/kg (ppm)	0.83	90	35-131
2-Chlorophenol	mg/kg (ppm)	0.83	92	58-111
1,3-Dichlorobenzene	mg/kg (ppm)	0.83	89	47-109
1,4-Dichlorobenzene	mg/kg (ppm)	0.83	91	46-110
1,2-Dichlorobenzene	mg/kg (ppm)	0.83	89	50-110
Benzyl alcohol	mg/kg (ppm)	4.2	92	36-147
2,2'-Oxybis(1-chloropropane)	mg/kg (ppm)	0.83	95	54-113
2-Methylphenol	mg/kg (ppm)	0.83	93	60-114
Hexachloroethane	mg/kg (ppm)	0.83	96	45-111
N-Nitroso-di-n-propylamine	mg/kg (ppm)	0.83	97	70-130
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	0.83	94	66-112
Nitrobenzene	mg/kg (ppm)	0.83	76	59-111
Isophorone	mg/kg (ppm)	0.83	97	52-128
2-Nitrophenol	mg/kg (ppm)	0.83	96	60-121
2,4-Dimethylphenol	mg/kg (ppm)	0.83	97	53-119
Benzoic acid	mg/kg (ppm)	2.5	83	13-223
Bis(2-chloroethoxy)methane	mg/kg (ppm)	0.83	94	64-112
2,4-Dichlorophenol	mg/kg (ppm)	0.83	98	63-111
1,2,4-Trichlorobenzene	mg/kg (ppm)	0.83	95	56-111
Naphthalene	mg/kg (ppm)	0.83	93	57-107
Hexachlorobutadiene	mg/kg (ppm)	0.83	91	49-119
4-Chloroaniline	mg/kg (ppm)	6.8	82	10-136
4-Chloro-3-methylphenol	mg/kg (ppm)	0.83	102	70-130
2-Methylnaphthalene	mg/kg (ppm)	0.83	98	63-112
1-Methylnaphthalene	mg/kg (ppm)	0.83	97	63-113
Hexachlorocyclopentadiene	mg/kg (ppm)	0.83	101	46-127
2,4,6-Trichlorophenol	mg/kg (ppm)	0.83	98	65-116
2,4,5-Trichlorophenol	mg/kg (ppm)	0.83	105	67-117
2-Chloronaphthalene	mg/kg (ppm)	0.83	99	67-109
2-Nitroaniline	mg/kg (ppm)	4.2	66	46-148
Dimethyl phthalate	mg/kg (ppm)	0.83	103	70-130
Acenaphthylene	mg/kg (ppm)	0.83	104	70-130
2,6-Dinitrotoluene	mg/kg (ppm)	0.83	104	70-130
Acenaphthene	mg/kg (ppm)	0.83	101	66-112
2,4-Dinitrophenol	mg/kg (ppm)	1.7	99	63-132
Dibenzofuran	mg/kg (ppm)	0.83	103	63-117
2,4-Dinitrotoluene	mg/kg (ppm)	0.83	113	52-140
4-Nitrophenol	mg/kg (ppm)	1.7	116	16-187
Diethyl phthalate	mg/kg (ppm)	0.83	103	64-120
Fluorene	mg/kg (ppm)	0.83	103	67-117
4-Chlorophenyl phenyl ether	mg/kg (ppm)	0.83	101	70-130
N-Nitrosodiphenylamine	mg/kg (ppm)	0.83	96	61-118
4-Nitroaniline	mg/kg (ppm)	4.2	59	28-121
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	0.83	108	51-152
Hexachlorobenzene	mg/kg (ppm)	0.83	83	70-130
Pentachlorophenol	mg/kg (ppm)	0.83	104	60-133
Phenanthrene	mg/kg (ppm)	0.83	103	70-130
Anthracene	mg/kg (ppm)	0.83	104	70-130
Carbazole	mg/kg (ppm)	0.83	77	63-122
Di-n-butyl phthalate	mg/kg (ppm)	0.83	102	48-128
Fluoranthene	mg/kg (ppm)	0.83	109	70-130
Pyrene	mg/kg (ppm)	0.83	93	70-130
Benzyl butyl phthalate	mg/kg (ppm)	0.83	92	64-135
Benz(a)anthracene	mg/kg (ppm)	0.83	96	70-130
Chrysene	mg/kg (ppm)	0.83	95	70-130
Bis(2-ethylhexyl) phthalate	mg/kg (ppm)	0.83	90	59-116
Di-n-octyl phthalate	mg/kg (ppm)	0.83	93	46-129
Benzo(a)pyrene	mg/kg (ppm)	0.83	95	68-120
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	97	67-128
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	98	70-130
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	101	67-129
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	104	67-128
Benzo(g,h,i)perylene	mg/kg (ppm)	0.83	102	65-130

Date of Report: 01/21/25
Date Received: 01/10/25
Project: Mercy Housing AS220138B, F&BI 501132

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 501084-01 (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	2.30	102 b	98 b	75-125	4 b
Barium	mg/kg (ppm)	50	23.9	106 b	95 b	75-125	11 b
Cadmium	mg/kg (ppm)	10	<1	98	99	75-125	1
Chromium	mg/kg (ppm)	50	10.1	86 b	86 b	75-125	0 b
Lead	mg/kg (ppm)	50	2.56	94	93	75-125	1
Mercury	mg/kg (ppm	5	<1	98	100	75-125	2
Selenium	mg/kg (ppm)	5	<1	95	97	75-125	2
Silver	mg/kg (ppm)	10	<1	96	98	75-125	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	98	80-120
Barium	mg/kg (ppm)	50	102	80-120
Cadmium	mg/kg (ppm)	10	100	80-120
Chromium	mg/kg (ppm)	50	100	80-120
Lead	mg/kg (ppm)	50	100	80-120
Mercury	mg/kg (ppm)	5	106	80-120
Selenium	mg/kg (ppm)	5	98	80-120
Silver	mg/kg (ppm)	10	100	80-120

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, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. 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 between the method detection limit and the lowest calibration point. 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.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

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.

501132

SAMPLE CHAIN OF CUSTODY

01110125 A3/N3

Page # 1 of 2

Report To Ali Cochrane & Hannah Cohen

Company Aspect Consulting

Address 710 2nd Ave, Suite #550

City, State, ZIP Seattle, WA

Phone _____ Email Ali.Cochrane + Hannah.Cohen @aspectconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: Mercy Housing

PO #: AS220138 B

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	SVOCs ~~PAHs~~ EPA 8270	PCBs EPA 8082	RCRA 8				Notes
																	X-per HC MG 1/14
AB-06-1.5	01 A.E	1/09/25	0840	S	5	X	X			X	X		X				HOLD
AB-06-4	02		0850		6												
AB-06-7	03		0900		5	X	X			X	X		X				
AB-06-9	04		0915		6												
AB-06-11.5	05		0925		5	X	X			X	X		X				
AB-06-14	06		0940														
AB-06-17	07		0950			X	X			X	X		X				
AB-06-19	08		1005			X	X			X	X		X				
AB-06-22	09		1035														
AB-06-28	10		1050			X	X			X	X		X				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Favour Epuna	Aspect	1/10/25	1938
Received by:	Anh Phan	FBI	01/10/25	15:38
Relinquished by:		Samples received at 3 °C		
Received by:				

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

501132

SAMPLE CHAIN OF CUSTODY

01/10/25 AS/ WS

Page # 2 of 2

Report To Ali Cochrane + Hannah Cohen

Company Aspect Consulting

Address 710 2nd Ave, Suite #550

City, State, ZIP Seattle, WA

Phone _____ Email Ali.Cochrane + Hannah.Cohen @aspectconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: Mercy Housing

PO #: AS220138 B

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

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: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	SVOCs EPA 8270 ~~PAHs~~	PCBs EPA 8082	RCRA 8				Notes
																	X - per HC 1/14
AB-06-33	11 A.E	1/9/25	1150	S	5	X	X			X	X		X				HOLD
AB-06-37	12		1210														
AB-06-~~DUP~~	13		1345			X	X			X	X		X				
AB-06-48	14		1415			X	X			X	X		X				
AB-06-54.5	15		1450														
AB-06-57	16		1535			X	X			X	X		X				
AB-06-62	17		1615														
AB-06-67.5	18	1/10/25	0910			X	X			X	X		X				
AB-06-73	19		1145														
AB-06-79	20		1220			X	X			X	X		X				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Favour Epuna	Aspect	1/10/25	1538
Received by:	Anh Phan	FBT	01/10/25	15:38
Relinquished by:		Samples received at 3 °C		
Received by:				

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 501132 CLIENT Aspect INITIALS/ DATE: AP 01/10/25

If custody seals are present on cooler, are they intact? ☑ NA ☐ YES ☐ NO

Cooler/Sample temperature 3 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☑ YES ☐ NO

How did samples arrive?
☑ Over the Counter ☐ Picked up by F&BI ☐ FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/ Date: (WD) 01/13
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory ~~0~~ ≥1 days

Are the samples clearly identified? (explain "no" answer below) ☑ YES ☐ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☑ YES ☐ NO

Were appropriate sample containers used? ☑ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☑ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☑ NA ☐ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?
(explain "no" answer below)

Sample ID's	☑ Yes ☐ No	☐ Not on COC/label
Date Sampled	☑ Yes ☐ No	☐ Not on COC/label
Time Sampled	☑ Yes ☐ No	☐ Not on COC/label
# of Containers	☑ Yes ☐ No	
Relinquished	☑ Yes ☐ No	
Requested analysis	☐ Yes ☑ On Hold	

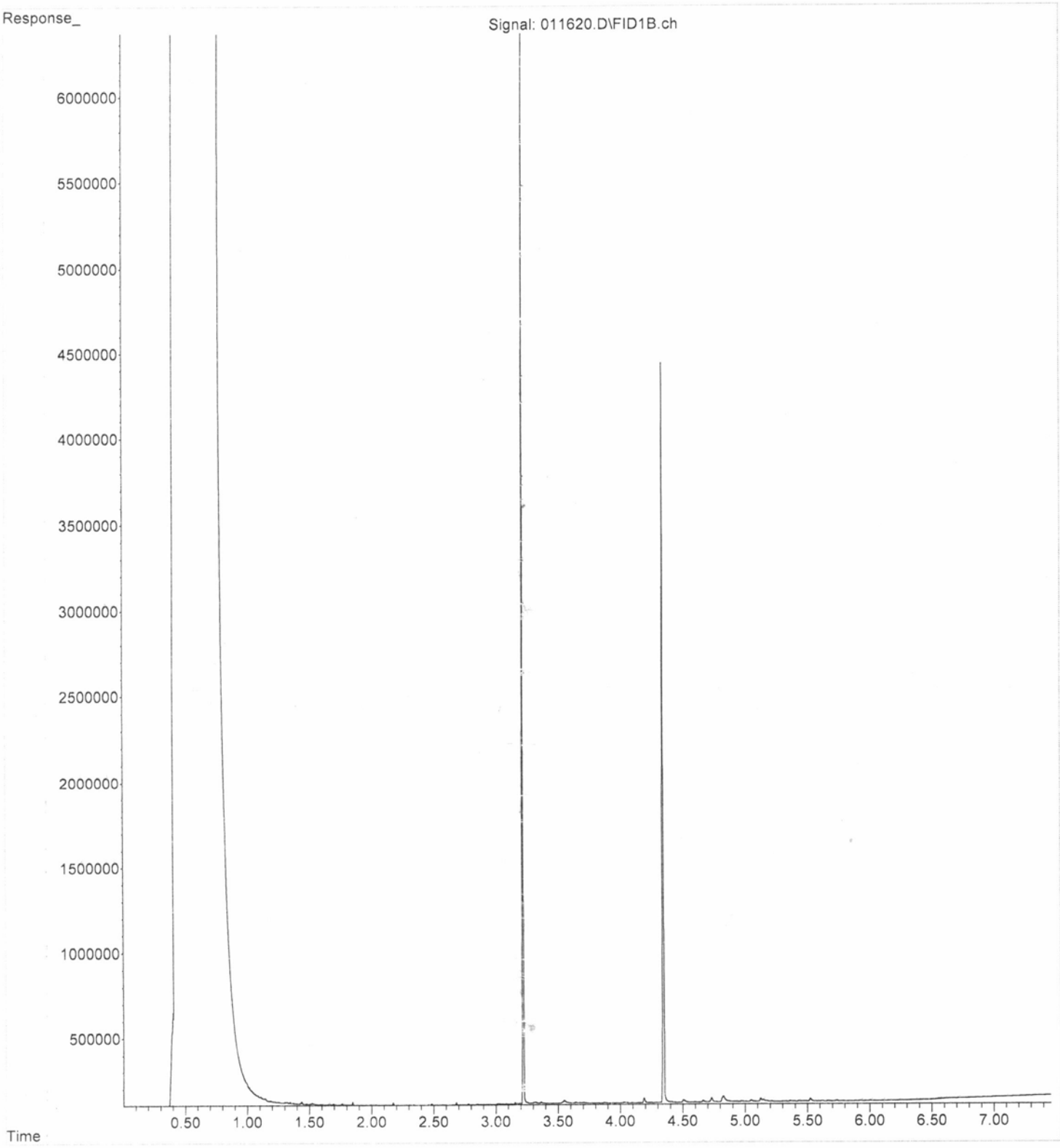
Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? ☑ NA ☐ YES ☐ NO

Number of unused TO15 canisters _____ **Number of unused TO17 tubes** _____

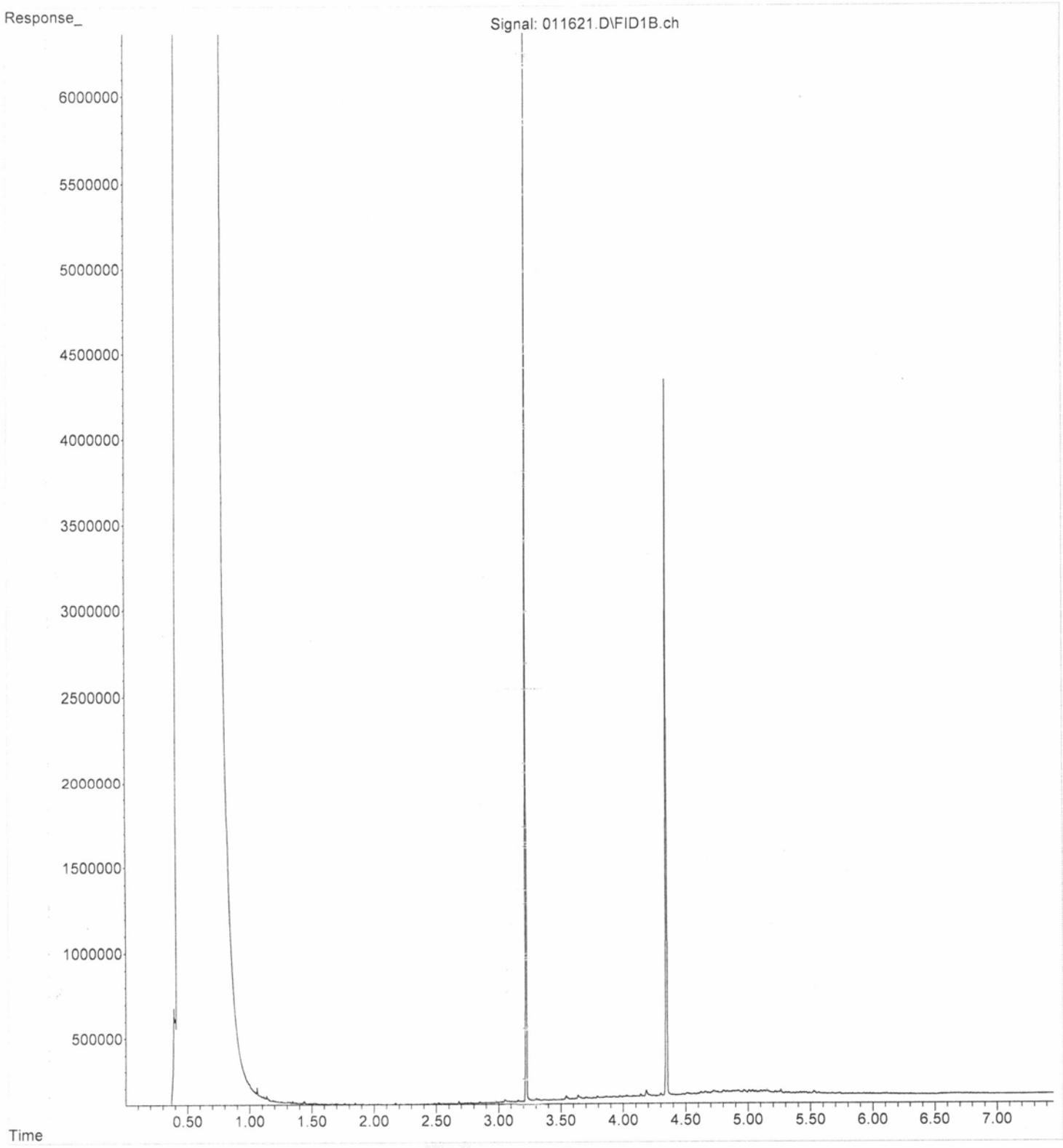
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Operator : TL
Acquired : 16 Jan 2025 02:56 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501132-01
Misc Info :
Vial Number: 19

ERR



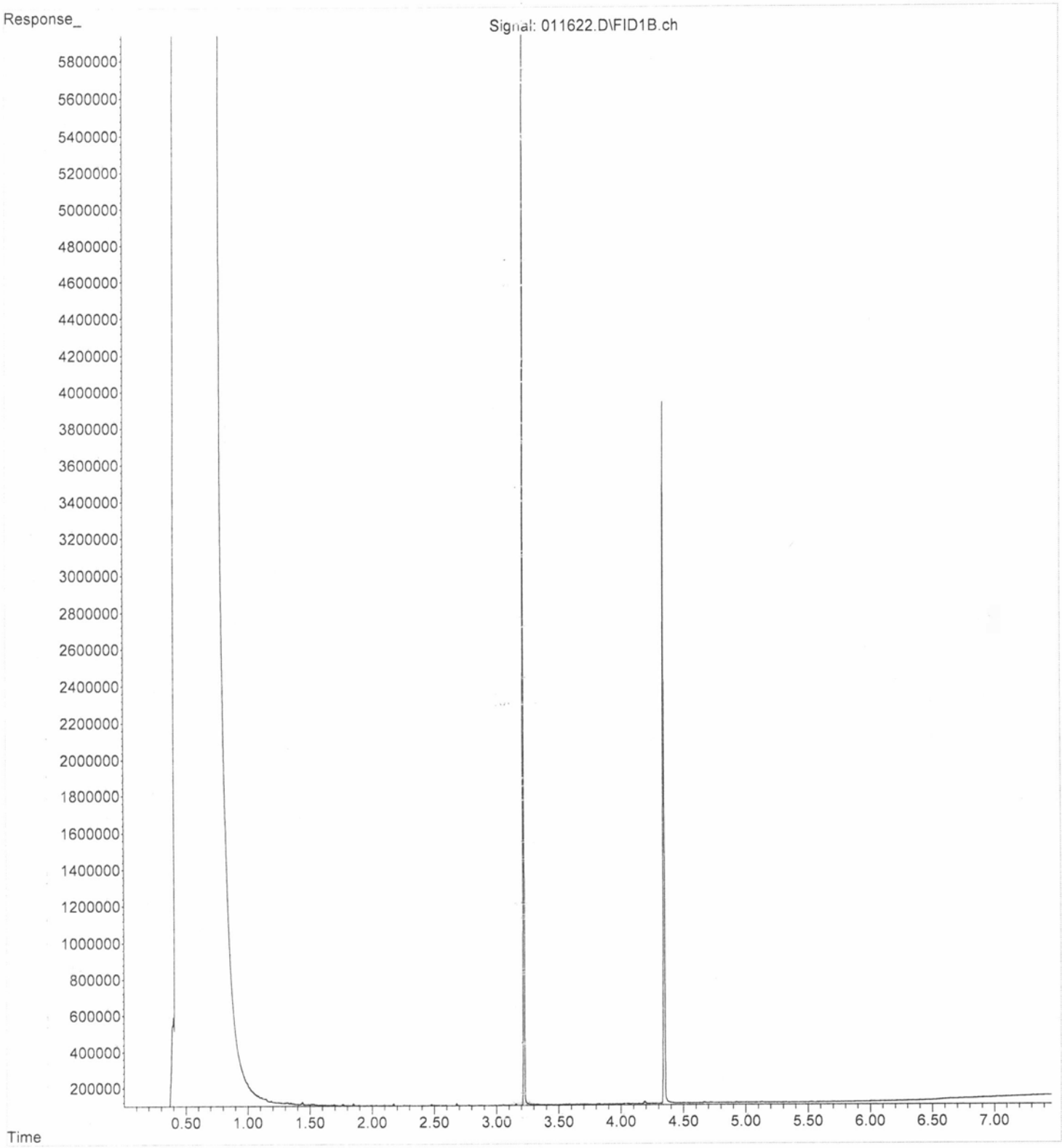
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Operator : TL
Acquired : 16 Jan 2025 03:07 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501132-03
Misc Info :
Vial Number: 20

ERR



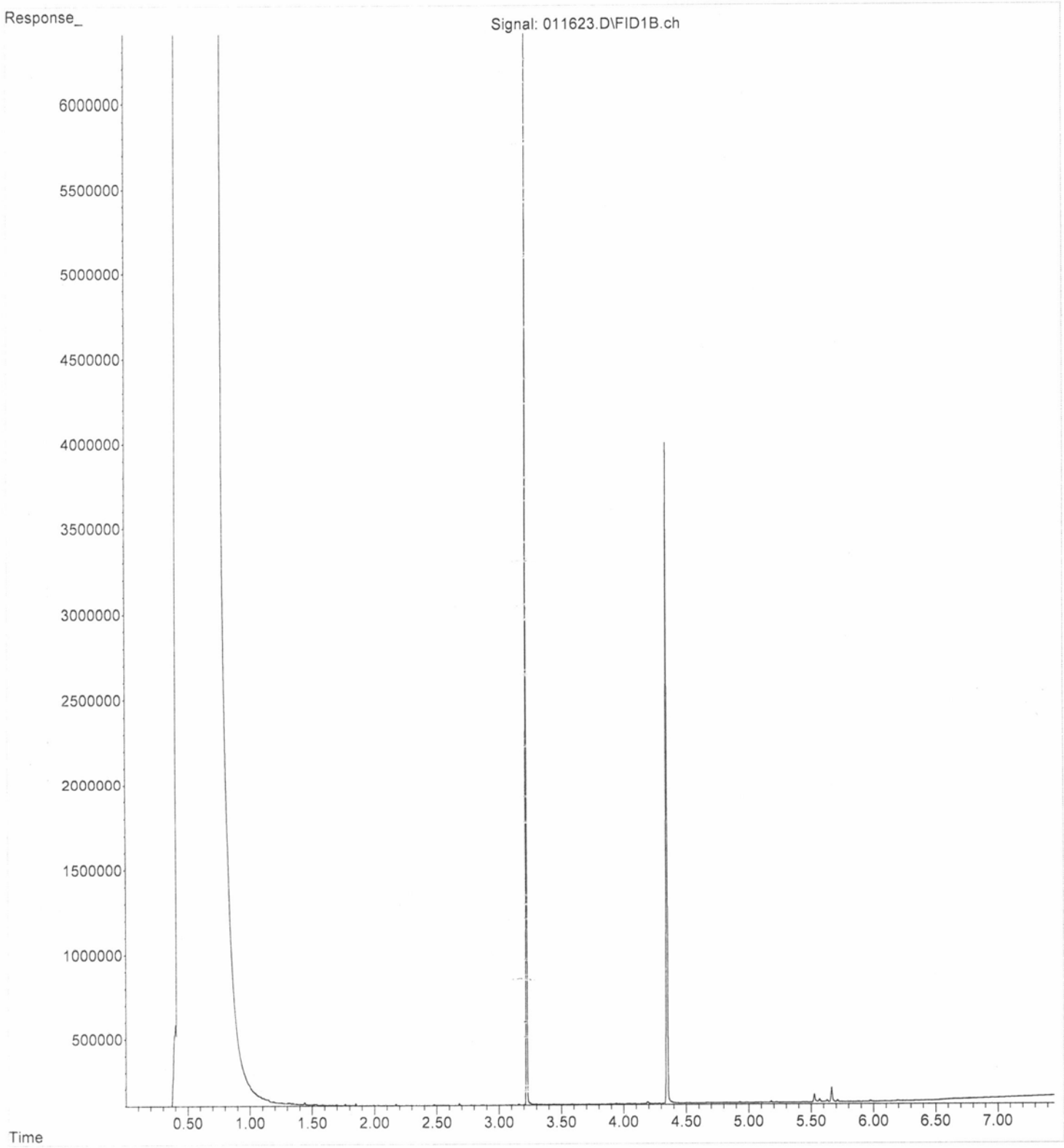
File :P:\Proc_GC13\01-16-25\011622.D
Operator : TL
Acquired : 16 Jan 2025 03:18 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501132-05
Misc Info :
Vial Number: 21

ERR



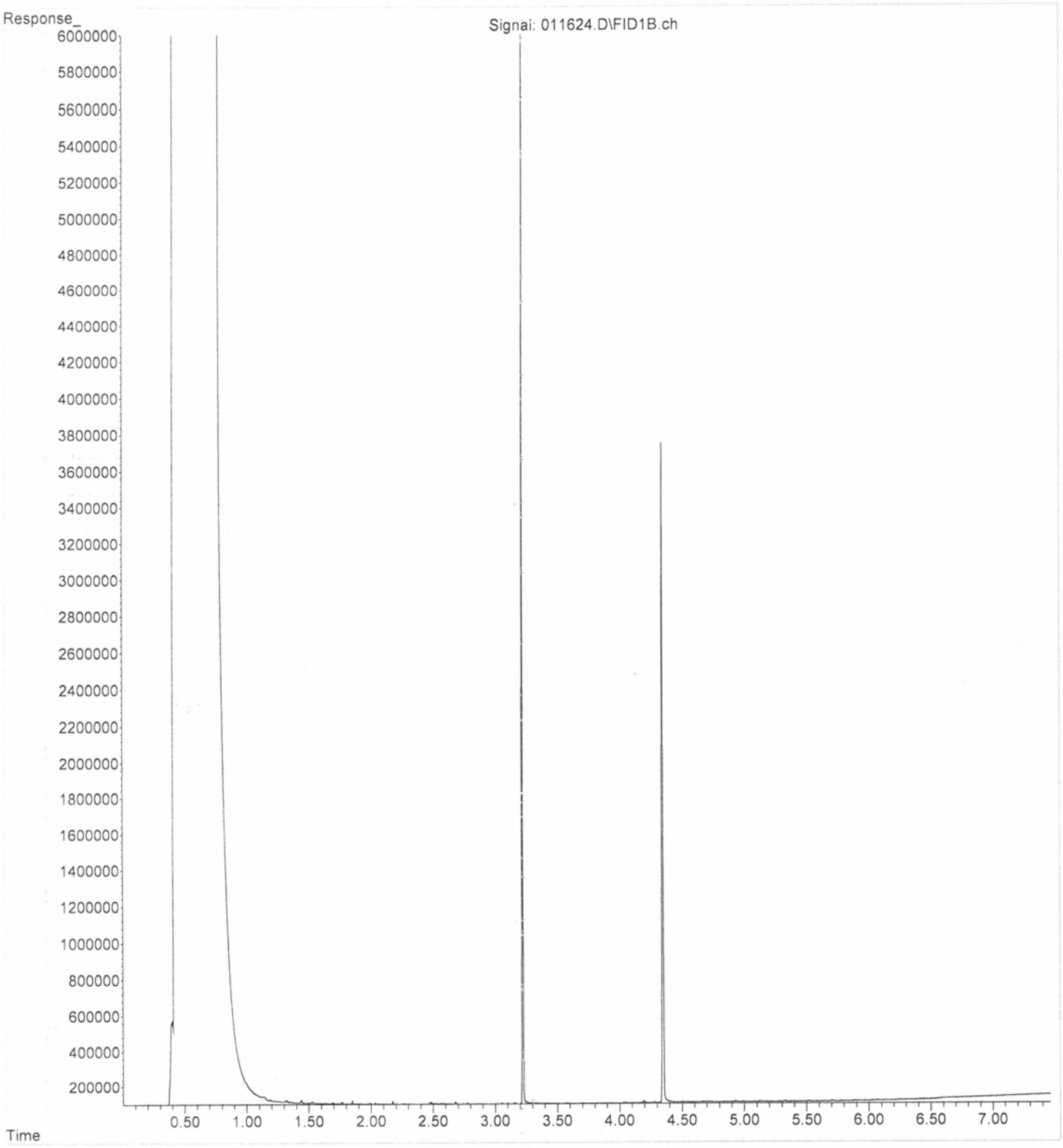
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Operator : TL
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Instrument : GC13
Sample Name: 501132-07
Misc Info :
Vial Number: 22

ERR



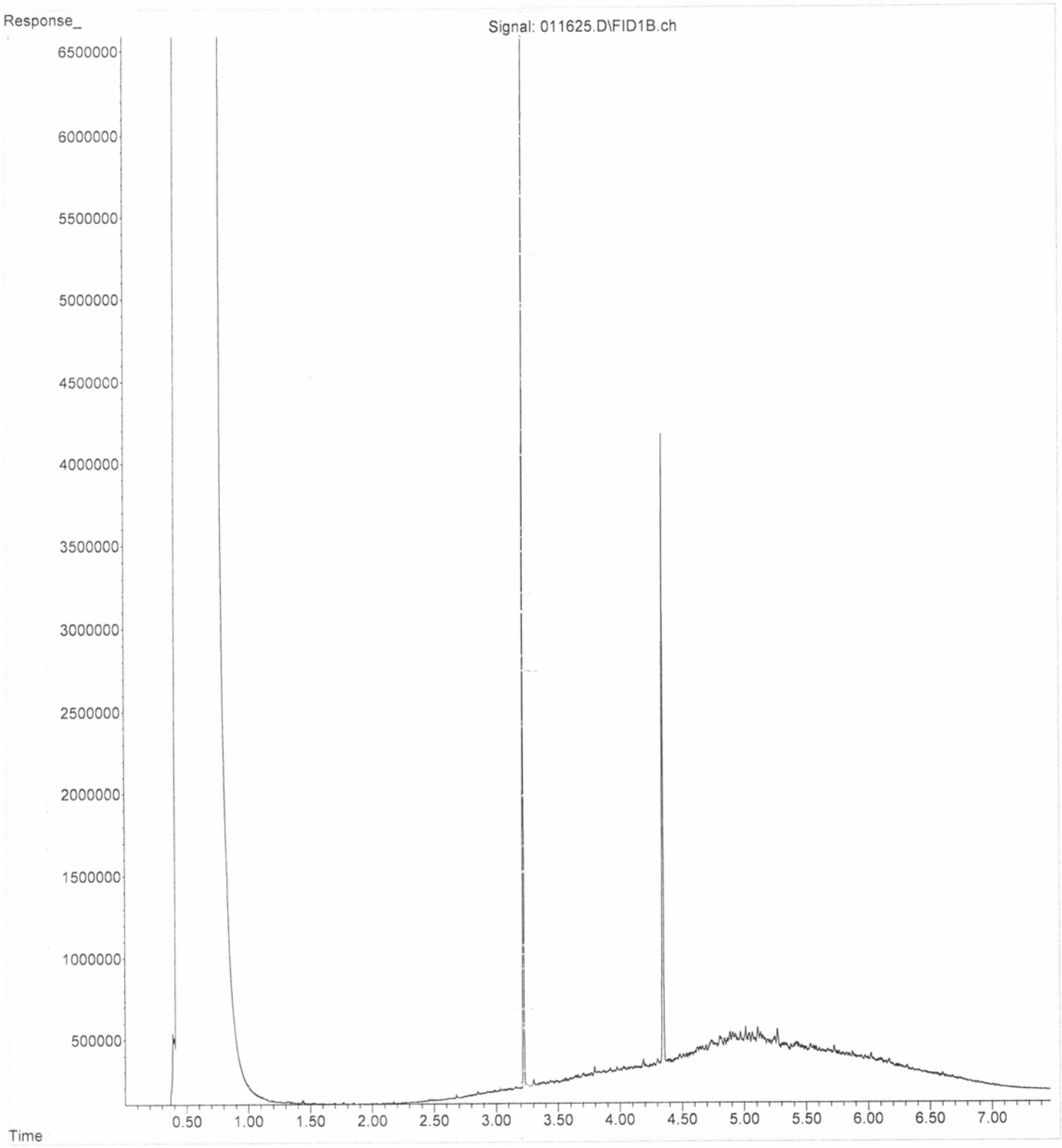
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Operator : TL
Acquired : 16 Jan 2025 03:41 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501132-08
Misc Info :
Vial Number: 23

ERR

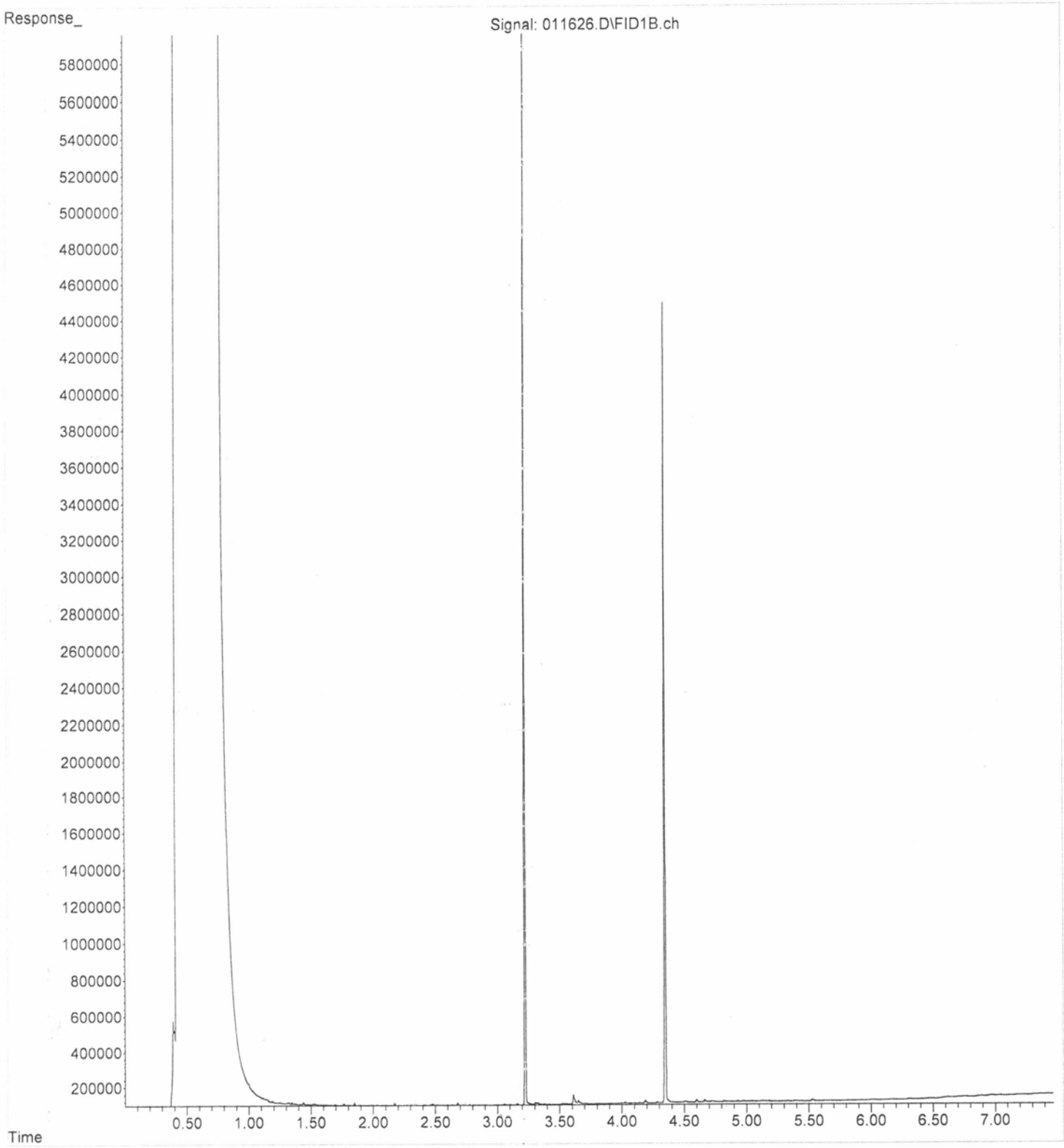


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Operator : TL
Acquired : 16 Jan 2025 03:52 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501132-10
Misc Info :
Vial Number: 24

ERR

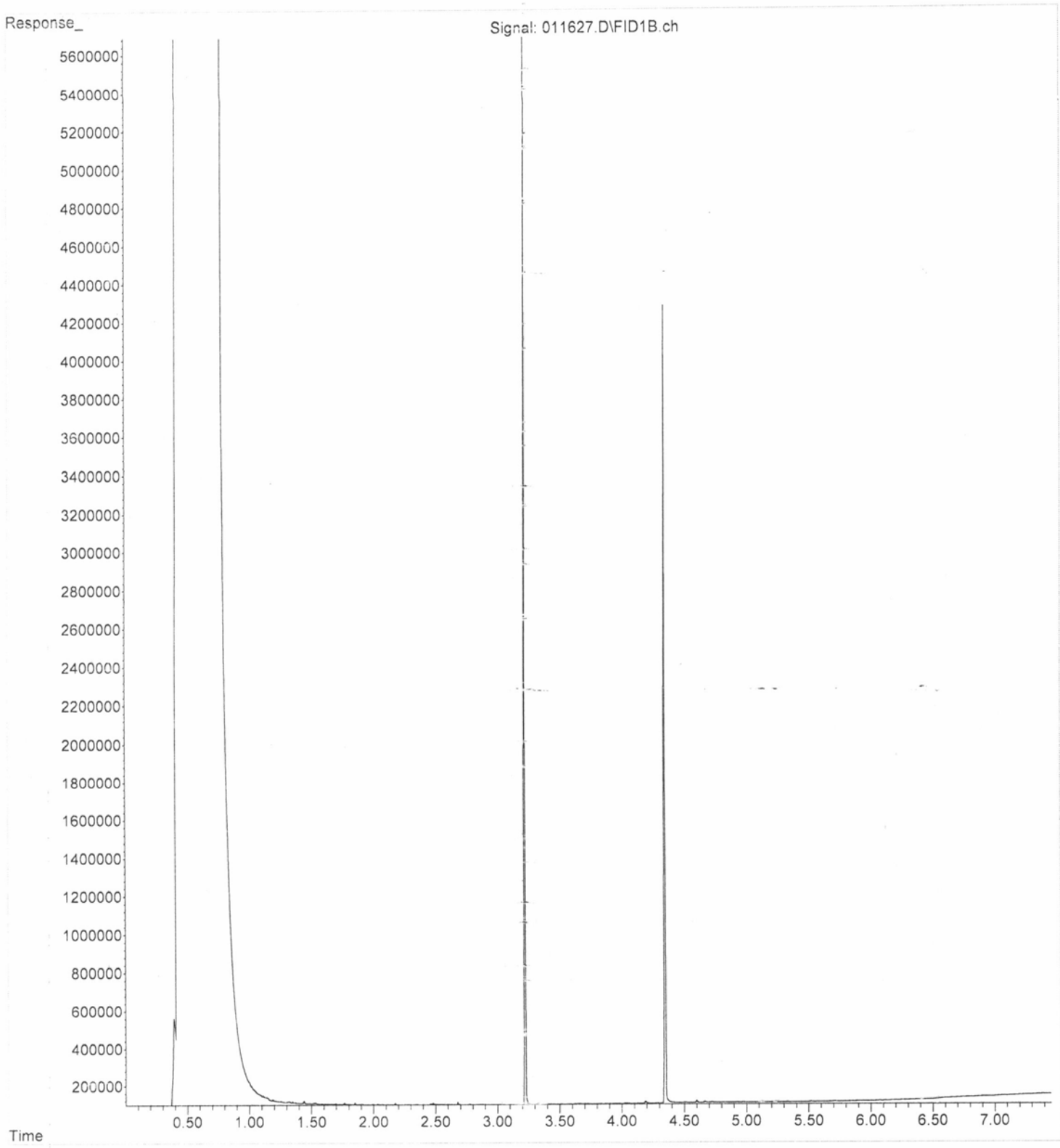


File :P:\Proc_GC13\01-16-25\011626.D
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Acquired : 16 Jan 2025 04:03 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501132-11
Misc Info : ERR
Vial Number: 25



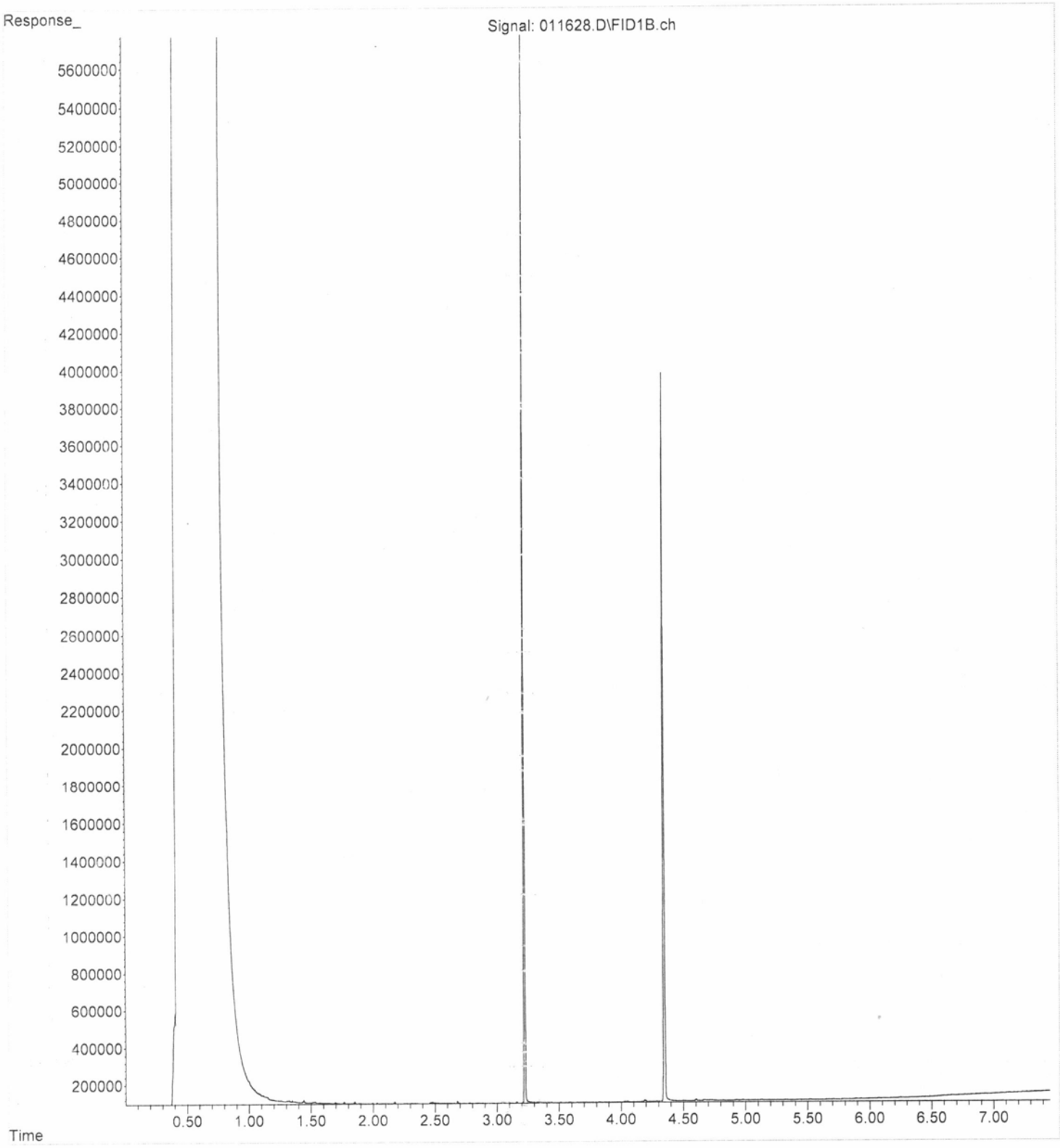
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Operator : TL
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Instrument : GC13
Sample Name: 501132-13
Misc Info :
Vial Number: 26

ERR



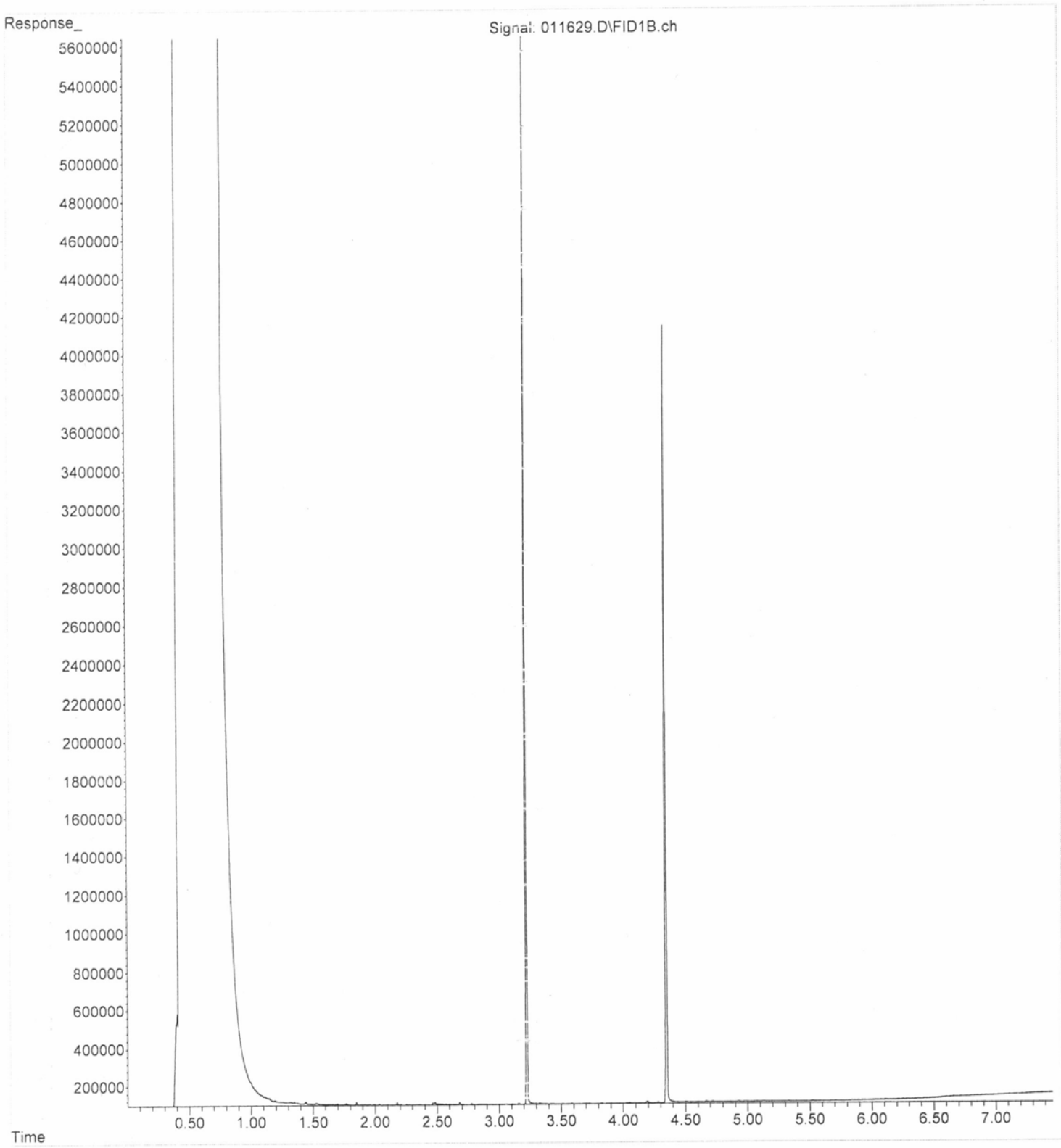
File :P:\Proc_GC13\01-16-25\011628.D
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Acquired : 16 Jan 2025 04:26 pm using AcqMethod Dx M
Instrument : GC13
Sample Name: 501132-14
Misc Info :
Vial Number: 27

ERR



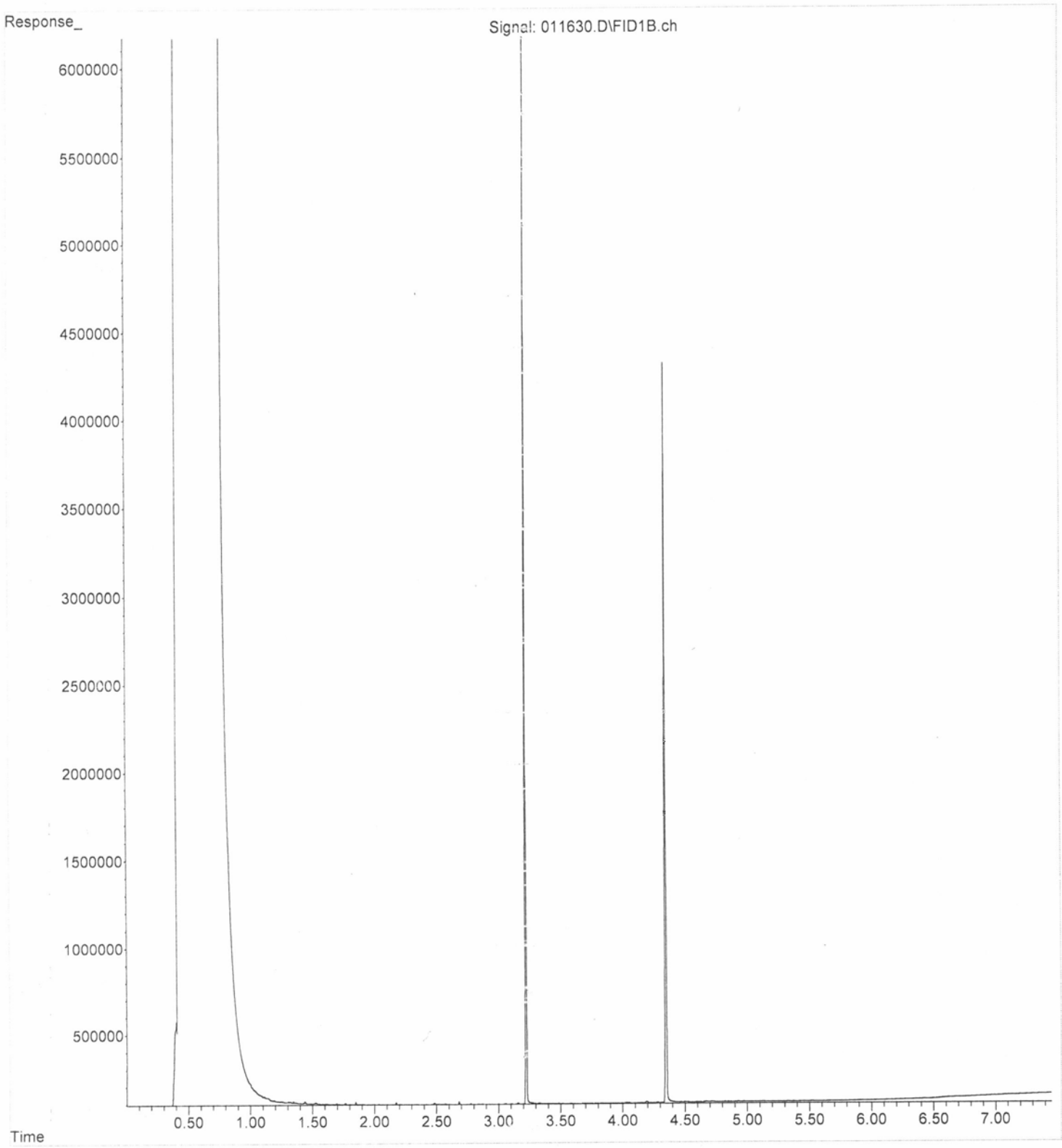
File :P:\Proc_GC13\01-16-25\011629.D
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Instrument : GC13
Sample Name: 501132-16
Misc Info :
Vial Number: 28

ERR



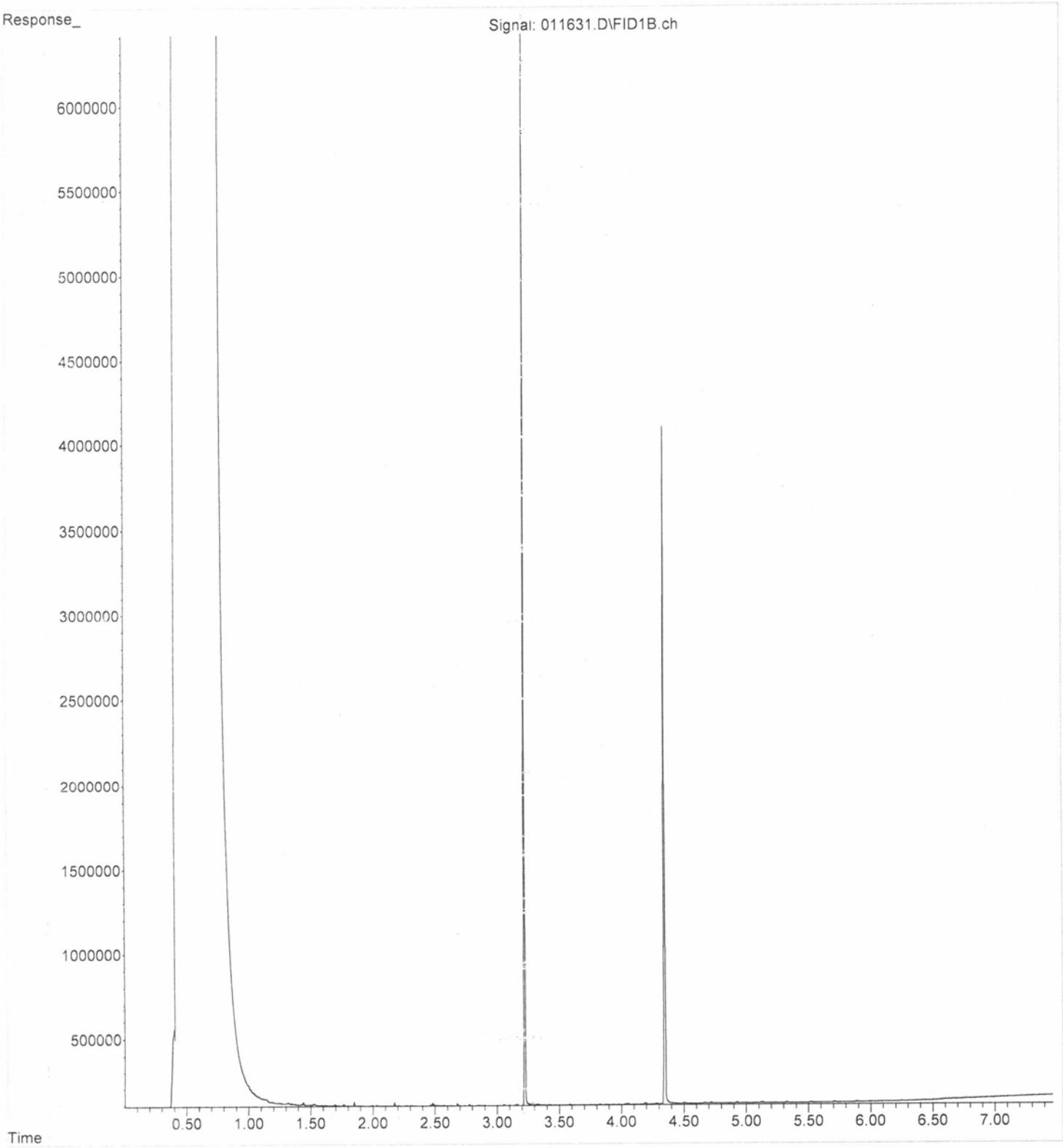
File :P:\Proc_GC13\01-16-25\011630.D
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Instrument : GC13
Sample Name: 501132-18
Misc Info :
Vial Number: 29

ERR



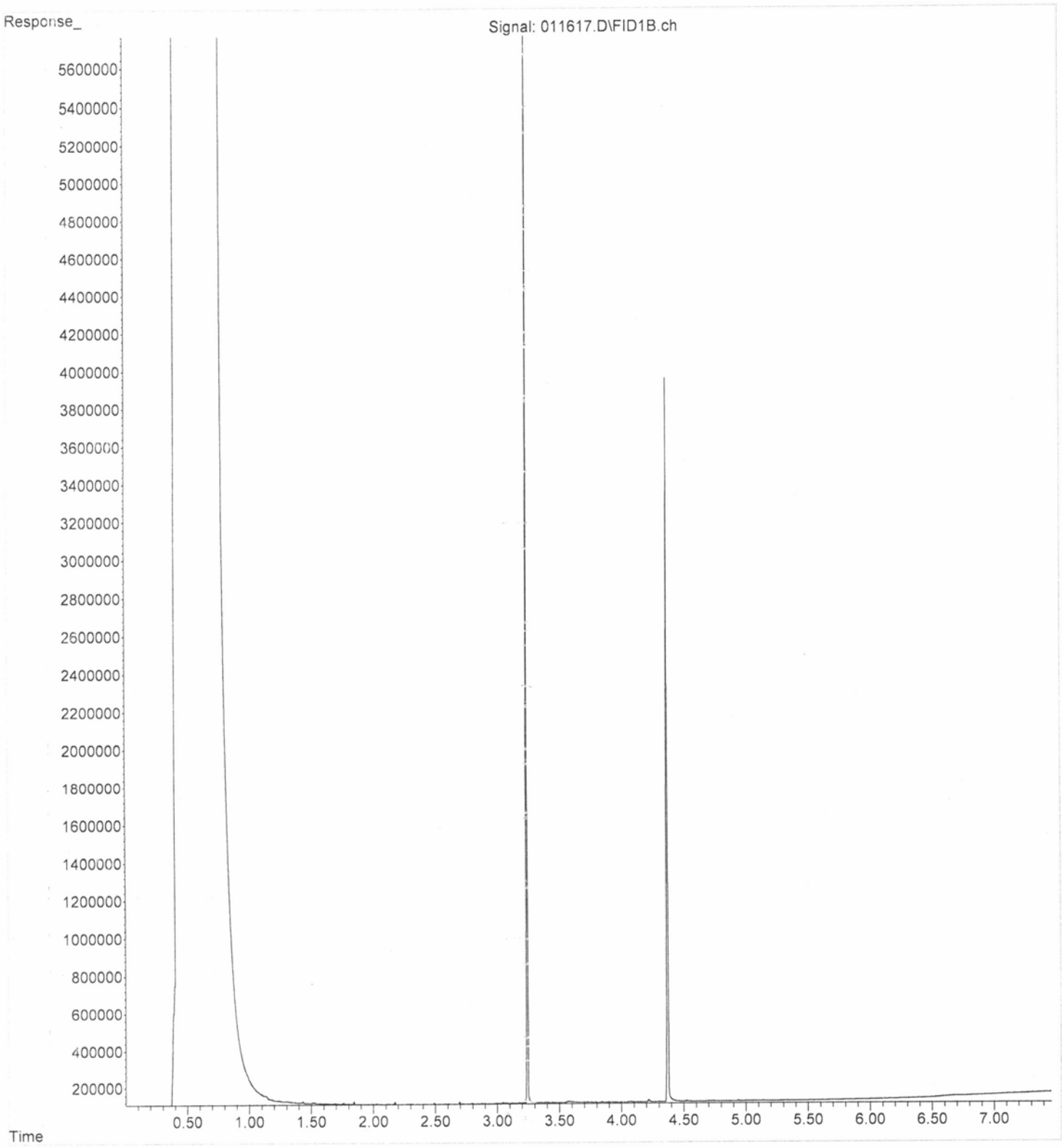
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Instrument : GC13
Sample Name: 501132-20
Misc Info :
Vial Number: 30

ERR



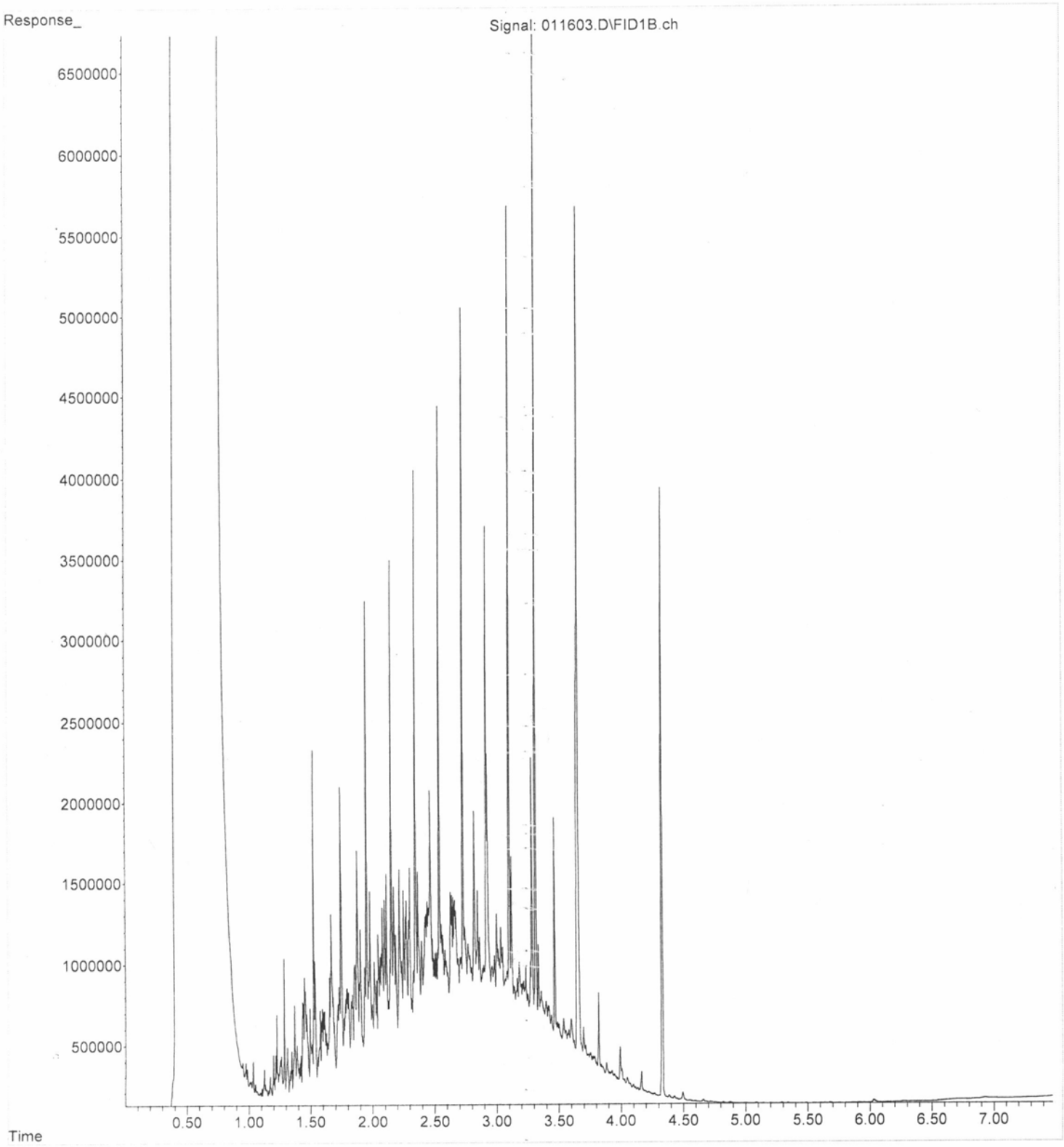
File :P:\Proc_GC13\01-16-25\011617.D
Operator : TL
Acquired : 16 Jan 2025 02:22 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 05-199 mb
Misc Info :
Vial Number: 16

ERR



File : P:\Proc_GC13\01-16-25\011603.D
Operator : TL
Acquired : 16 Jan 2025 08:17 am using AcqMethod Dx.M
Instrument : GC13
Sample Name: 500 Dx 74-61B
Misc Info :
Vial Number: 3

ERR



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

January 30, 2025

Ali Cochrane, Project Manager
Aspect Consulting
710 2nd Ave S, Suite 550
Seattle, WA 98104

Dear Ms Cochrane:

Included are the additional results from the testing of material submitted on January 10, 2025 from the Mercy Housing AS220138B, F&BI 501132 project. There is 1 page 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: Aspect Data, Hannah Cohen
ASP0130R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 10, 2025 by Friedman & Bruya, Inc. from the Aspect Consulting Mercy Housing AS220138B, F&BI 501132 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Aspect Consulting
501132 -01	AB-06-1.5
501132 -02	AB-06-4
501132 -03	AB-06-7
501132 -04	AB-06-9
501132 -05	AB-06-11.5
501132 -06	AB-06-14
501132 -07	AB-06-17
501132 -08	AB-06-19
501132 -09	AB-06-22
501132 -10	AB-06-28
501132 -11	AB-06-33
501132 -12	AB-06-37
501132 -13	AB-06-42
501132 -14	AB-06-48
501132 -15	AB-06-54.5
501132 -16	AB-06-57
501132 -17	AB-06-62
501132 -18	AB-06-67.5
501132 -19	AB-06-73
501132 -20	AB-06-79

Sample AB-06-33 was sent to Alliance Technical Group for hexavalent chromium testing. The report is enclosed.

501132

SAMPLE CHAIN OF CUSTODY

01110125 A3/N3

Page # 1 of 2

Report To Ali Cochrane & Hannah Cohen

Company Aspect Consulting

Address 710 2nd Ave, Suite #550

City, State, ZIP Seattle, WA

Phone _____ Email Ali.Cochrane + Hannah.Cohen @aspectconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: Mercy Housing

PO #: AS220138 B

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	SVOCs ~~PAHs~~ EPA 8270	PCBs EPA 8082	RCRA 8				Notes
																	X-per HC MG 1/14
AB-06-1.5	01 A.E	1/09/25	0840	S	5	X	X			X	X		X				HOLD
AB-06-4	02		0850		6												
AB-06-7	03		0900		5	X	X			X	X		X				
AB-06-9	04		0915		6												
AB-06-11.5	05		0925		5	X	X			X	X		X				
AB-06-14	06		0940														
AB-06-17	07		0950			X	X			X	X		X				
AB-06-19	08		1005			X	X			X	X		X				
AB-06-22	09		1035														
AB-06-28	10		1050			X	X			X	X		X				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Favour Epuna	Aspect	1/10/25	1938
Received by:	Anh Phan	FBI	01/10/25	15:38
Relinquished by:		Samples received at 3 °C		
Received by:				

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

501132

SAMPLE CHAIN OF CUSTODY

01/10/25 #3/ 103

Page # 2 of 2

Report To Ali Cochrane + Hannah Cohen

Company Aspect Consulting

Address 710 2nd Ave, Suite #550

City, State, ZIP Seattle, WA

Phone _____ Email Ali.Cochrane + Hannah.Cohen @aspectconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: Mercy Housing

PO #: AS220138 B

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	~~PAHs~~ SVOC EPA 8270	PCBs EPA 8082	RCRA 8	Cr VI			X-per HC 1/14 Notes A-per HC 01/22/25 ME
AB-06-33	11 A.E	1/9/25	1150	S	5	X	X			X	X		X	A			HOLD
AB-06-37	12		1210														
AB-06-~~DD~~	13		1345			X	X			X	X		X				
AB-06-48	14		1415			X	X			X	X		X				
AB-06-54.5	15		1450														
AB-06-57	16		1535			X	X			X	X		X				
AB-06-62	17		1615														
AB-06-67.5	18	1/10/25	0910			X	X			X	X		X				
AB-06-73	19		1145														
AB-06-79	20		1220			X	X			X	X		X				

ANALYSES REQUESTED

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Favour Epuna	Aspect	1/10/25	1538
Received by:	Anh Phan	FBT	01/10/25	15:38
Relinquished by:		Samples received at 3 °C		
Received by:				

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 501132 CLIENT Aspect INITIALS/ DATE: AP 01/10/25

If custody seals are present on cooler, are they intact? ☑ NA ☐ YES ☐ NO

Cooler/Sample temperature 3 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☑ YES ☐ NO

How did samples arrive?
☑ Over the Counter ☐ Picked up by F&BI ☐ FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/ Date: (WD) 01/13
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory ~~0~~ ≥1 days

Are the samples clearly identified? (explain "no" answer below) ☑ YES ☐ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☑ YES ☐ NO

Were appropriate sample containers used? ☑ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☑ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☑ NA ☐ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?
(explain "no" answer below)

Sample ID's	☑ Yes ☐ No	☐ Not on COC/label
Date Sampled	☑ Yes ☐ No	☐ Not on COC/label
Time Sampled	☑ Yes ☐ No	☐ Not on COC/label
# of Containers	☑ Yes ☐ No	
Relinquished	☑ Yes ☐ No	
Requested analysis	☐ Yes ☑ On Hold	

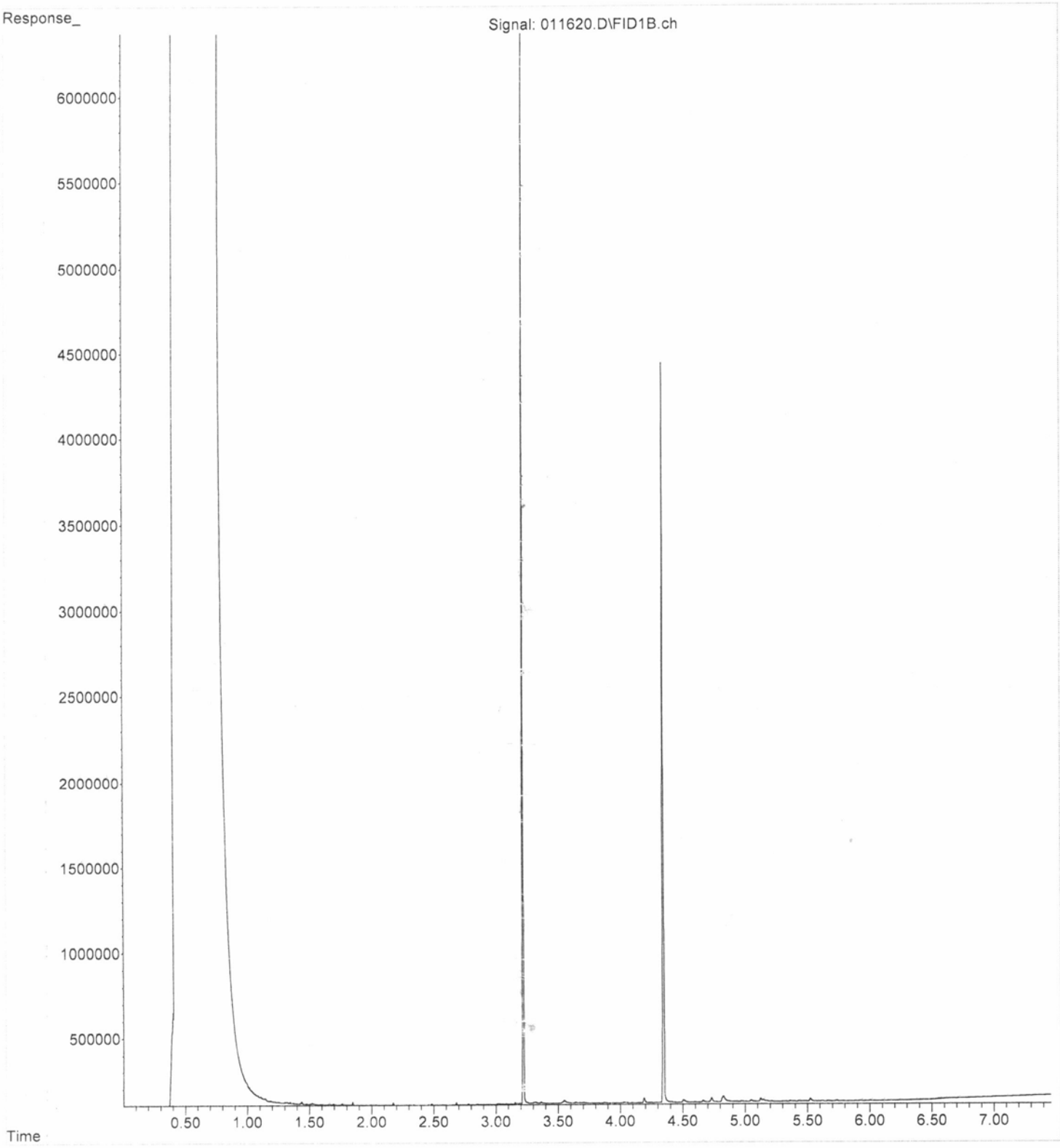
Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? ☑ NA ☐ YES ☐ NO

Number of unused TO15 canisters _____ **Number of unused TO17 tubes** _____

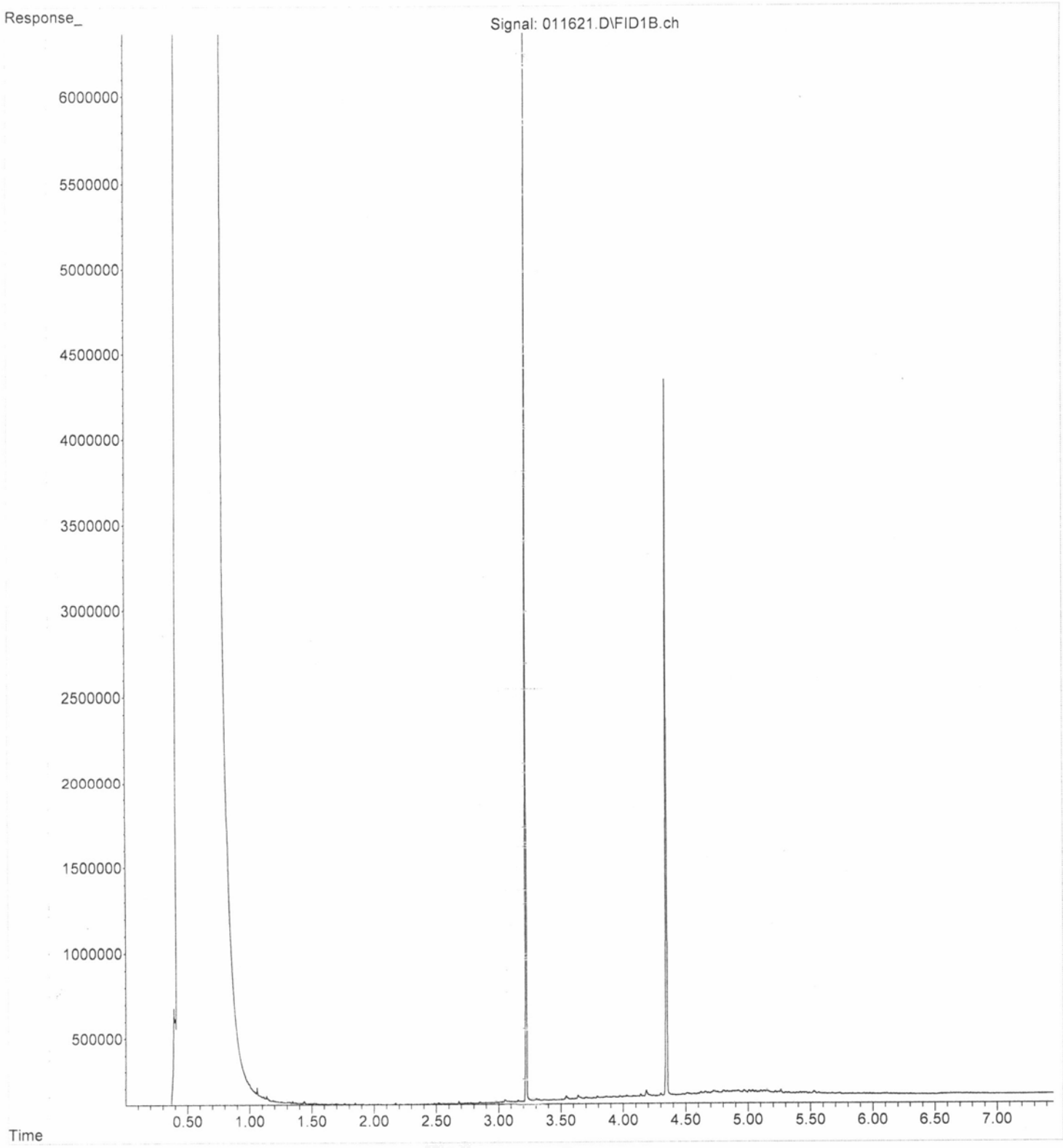
File :P:\Proc_GC13\01-16-25\011620.D
Operator : TL
Acquired : 16 Jan 2025 02:56 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501132-01
Misc Info :
Vial Number: 19

ERR



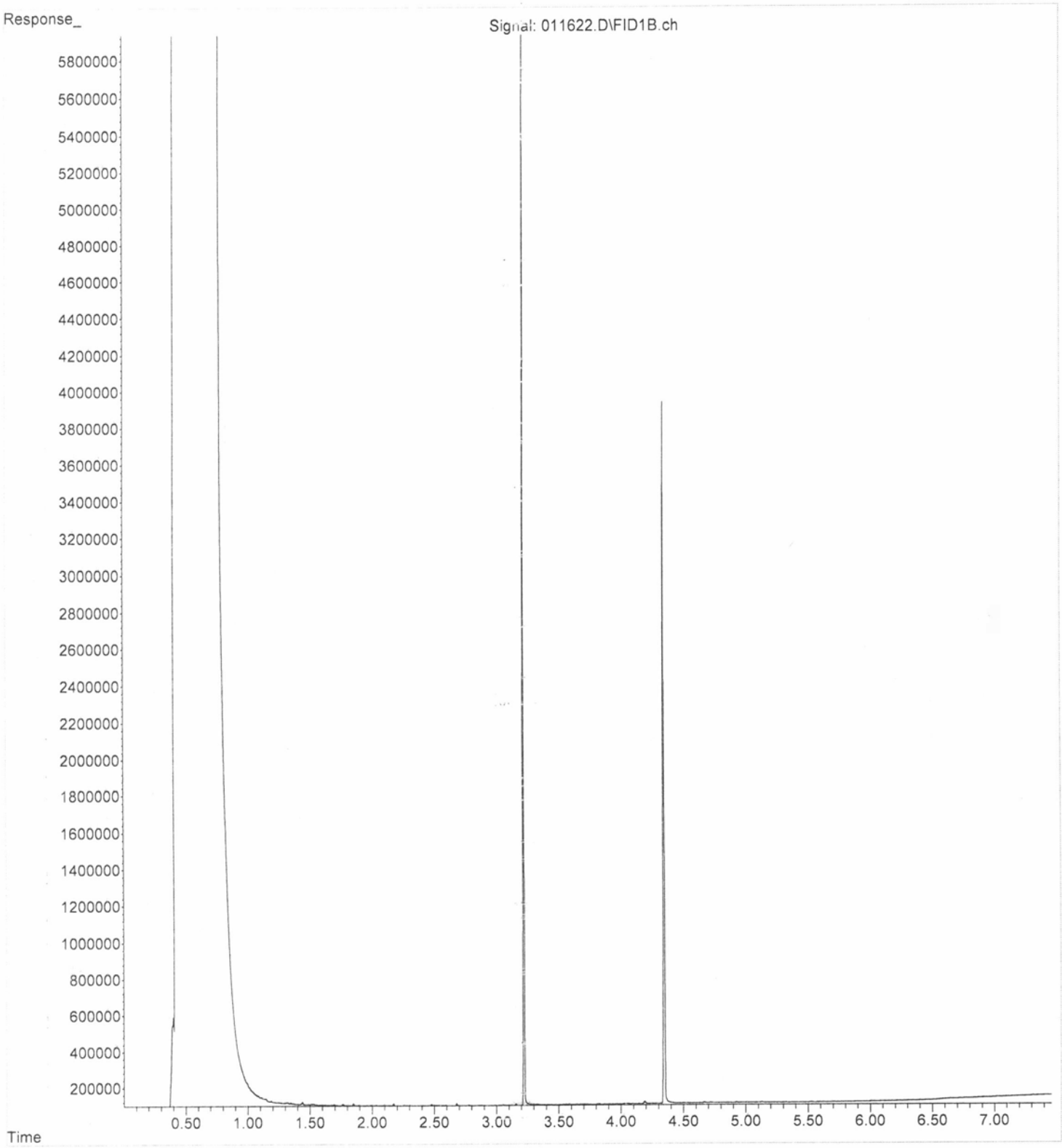
File :P:\Proc_GC13\01-16-25\011621.D
Operator : TL
Acquired : 16 Jan 2025 03:07 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501132-03
Misc Info :
Vial Number: 20

ERR



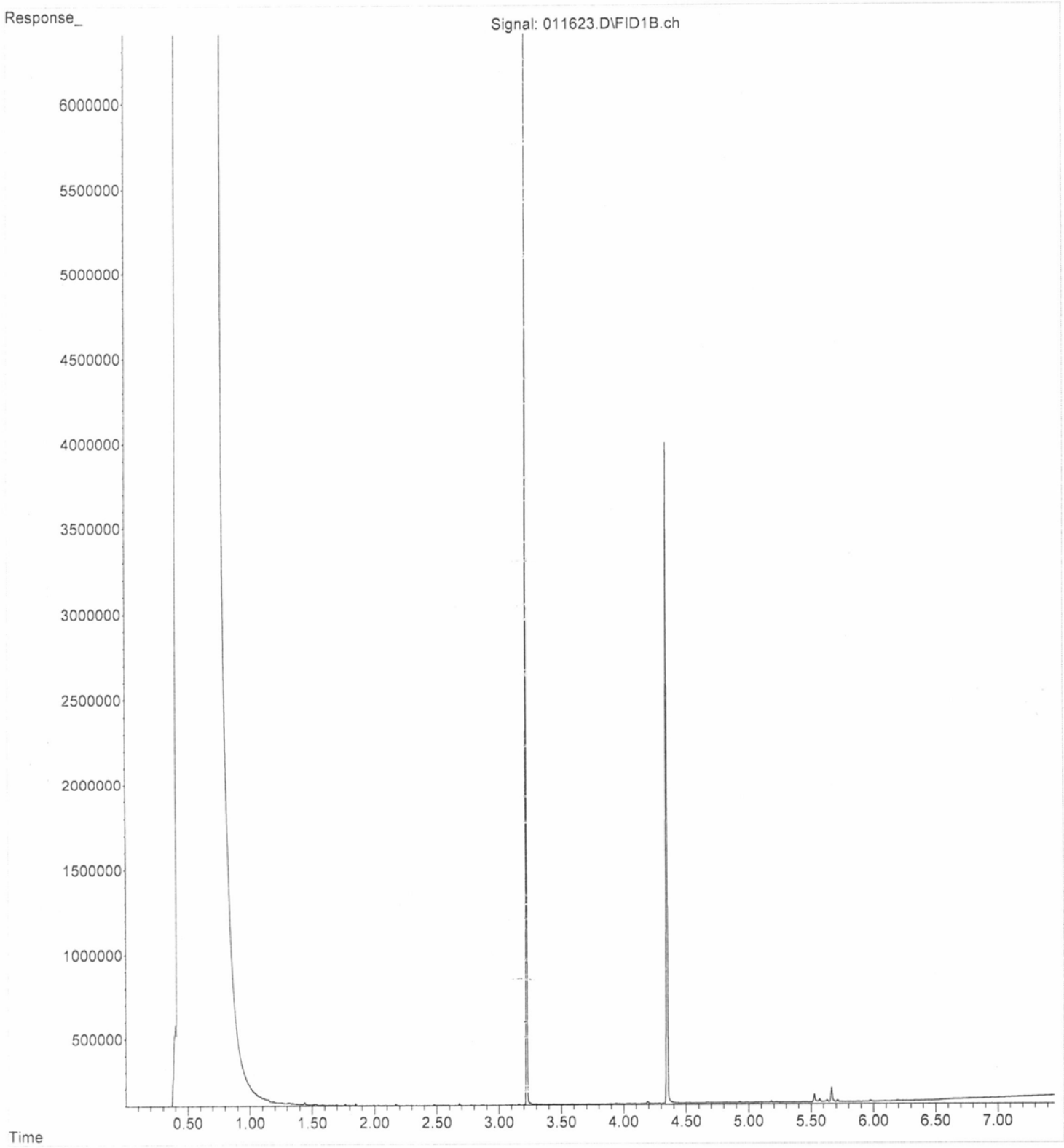
File :P:\Proc_GC13\01-16-25\011622.D
Operator : TL
Acquired : 16 Jan 2025 03:18 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501132-05
Misc Info :
Vial Number: 21

ERR



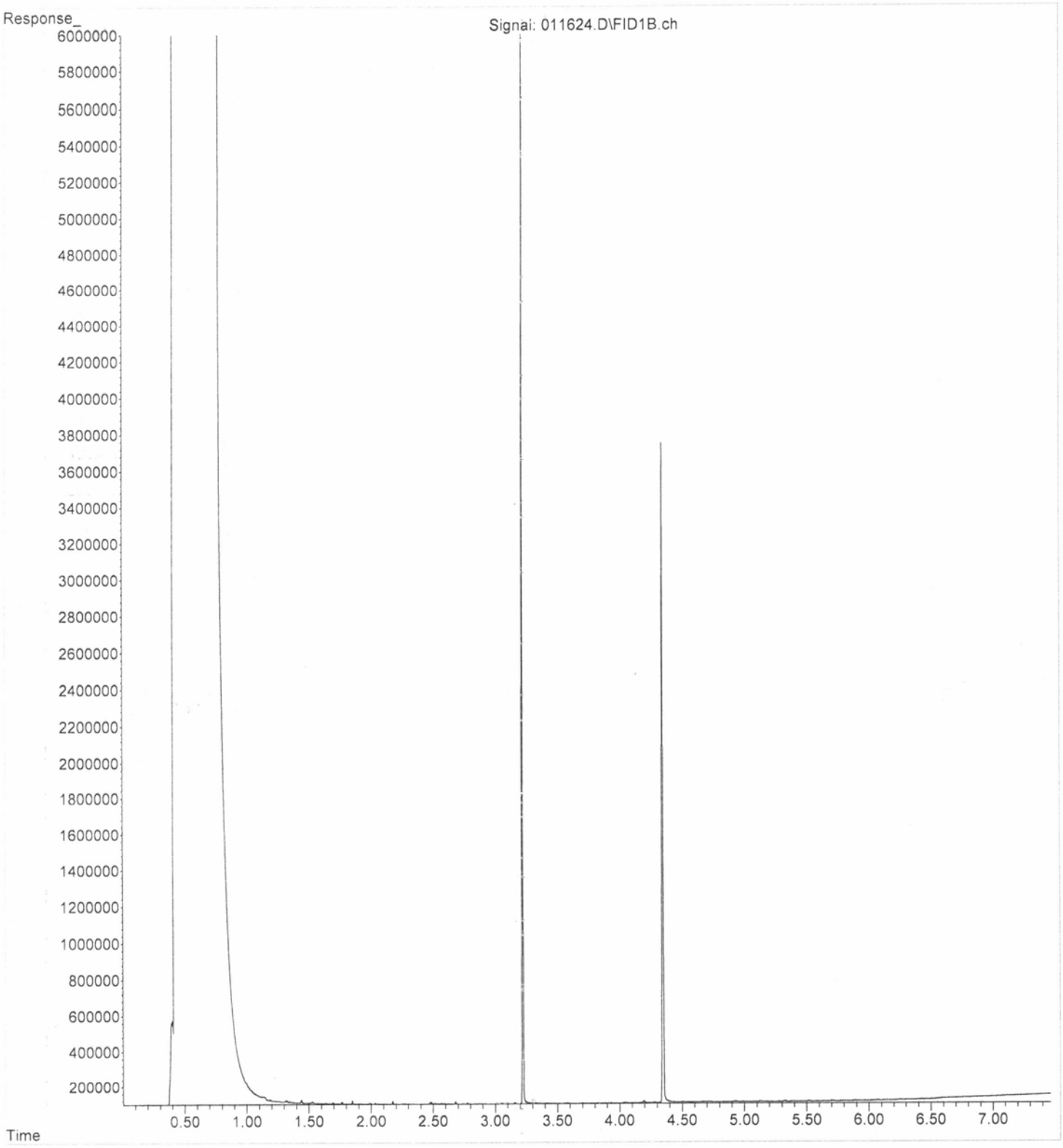
File :P:\Proc_GC13\01-16-25\011623.D
Operator : TL
Acquired : 16 Jan 2025 03:29 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501132-07
Misc Info :
Vial Number: 22

ERR



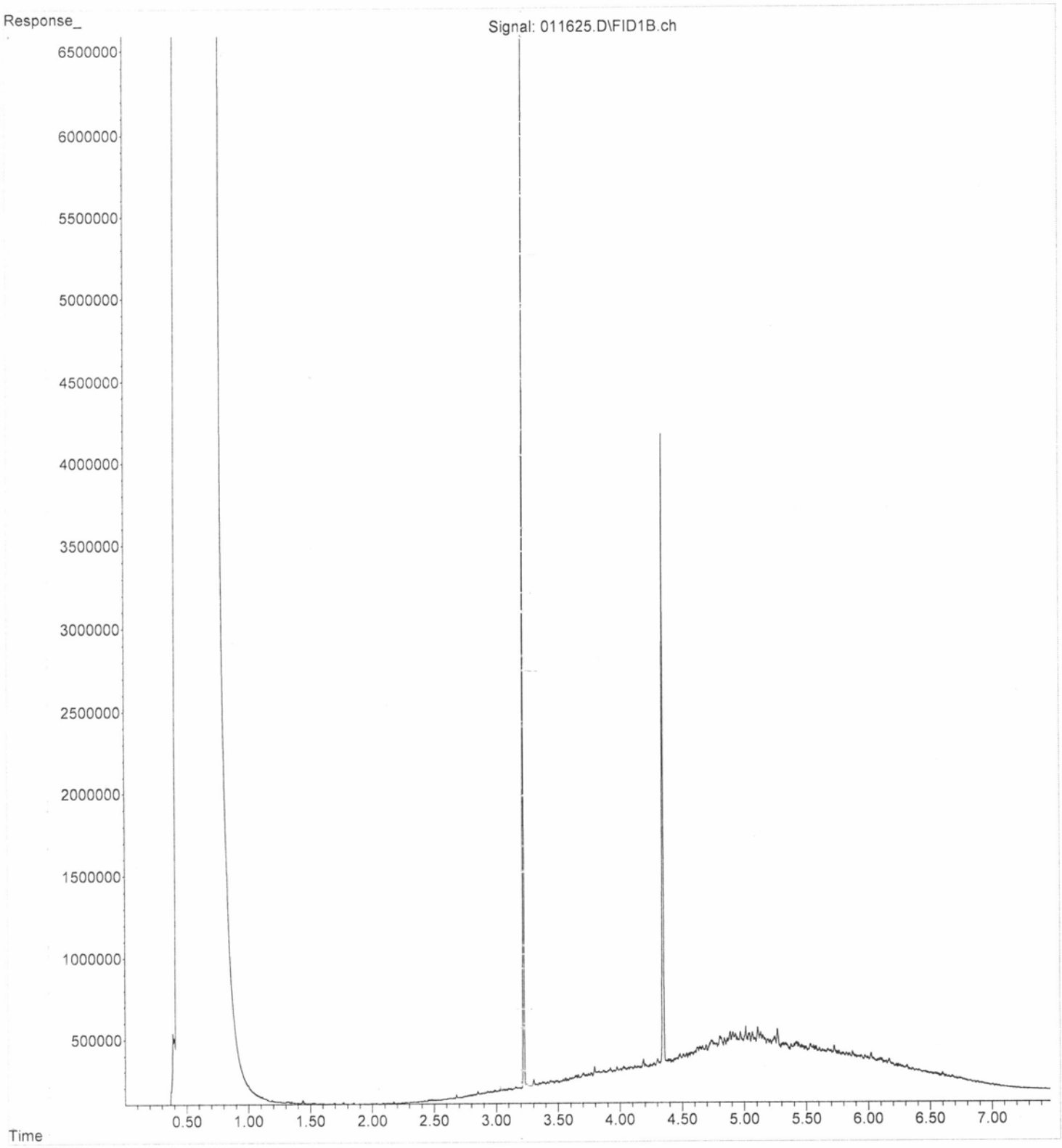
File : P:\Proc_GC13\01-16-25\011624.D
Operator : TL
Acquired : 16 Jan 2025 03:41 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501132-08
Misc Info :
Vial Number: 23

ERR

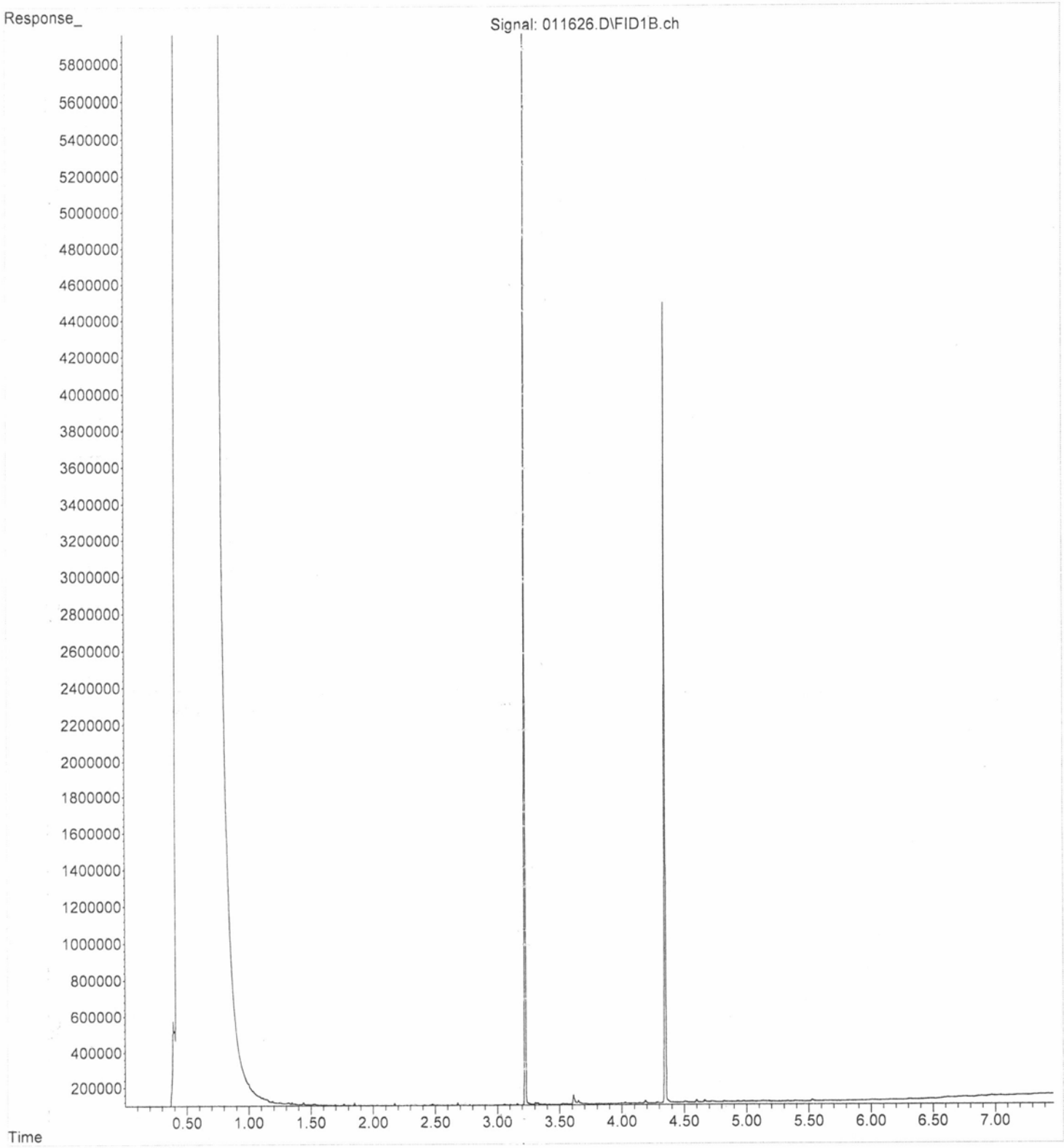


File :P:\Proc_GC13\01-16-25\011625.D
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Instrument : GC13
Sample Name: 501132-10
Misc Info :
Vial Number: 24

ERR

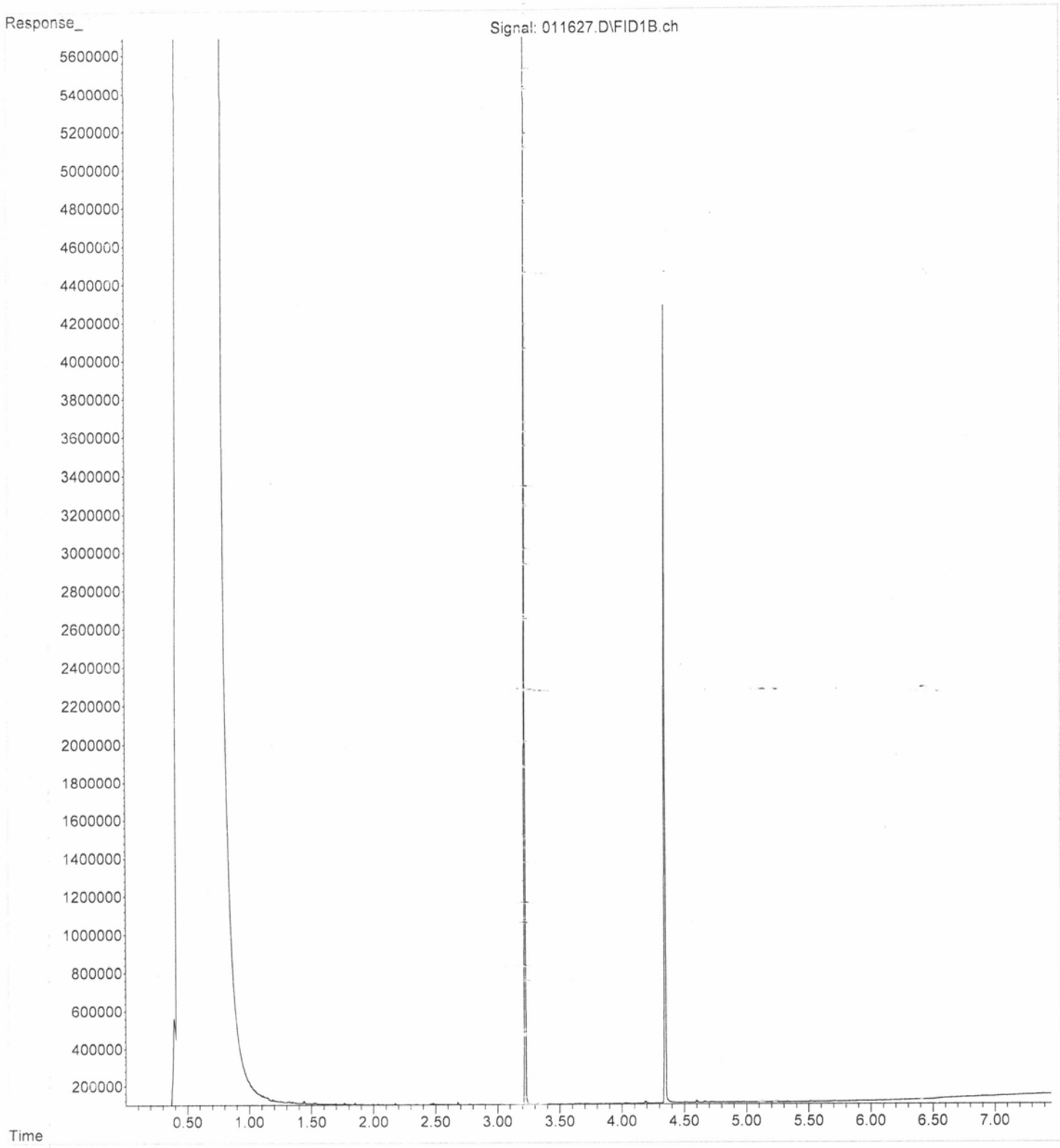


File :P:\Proc_GC13\01-16-25\011626.D
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Instrument : GC13
Sample Name: 501132-11
Misc Info : ERR
Vial Number: 25



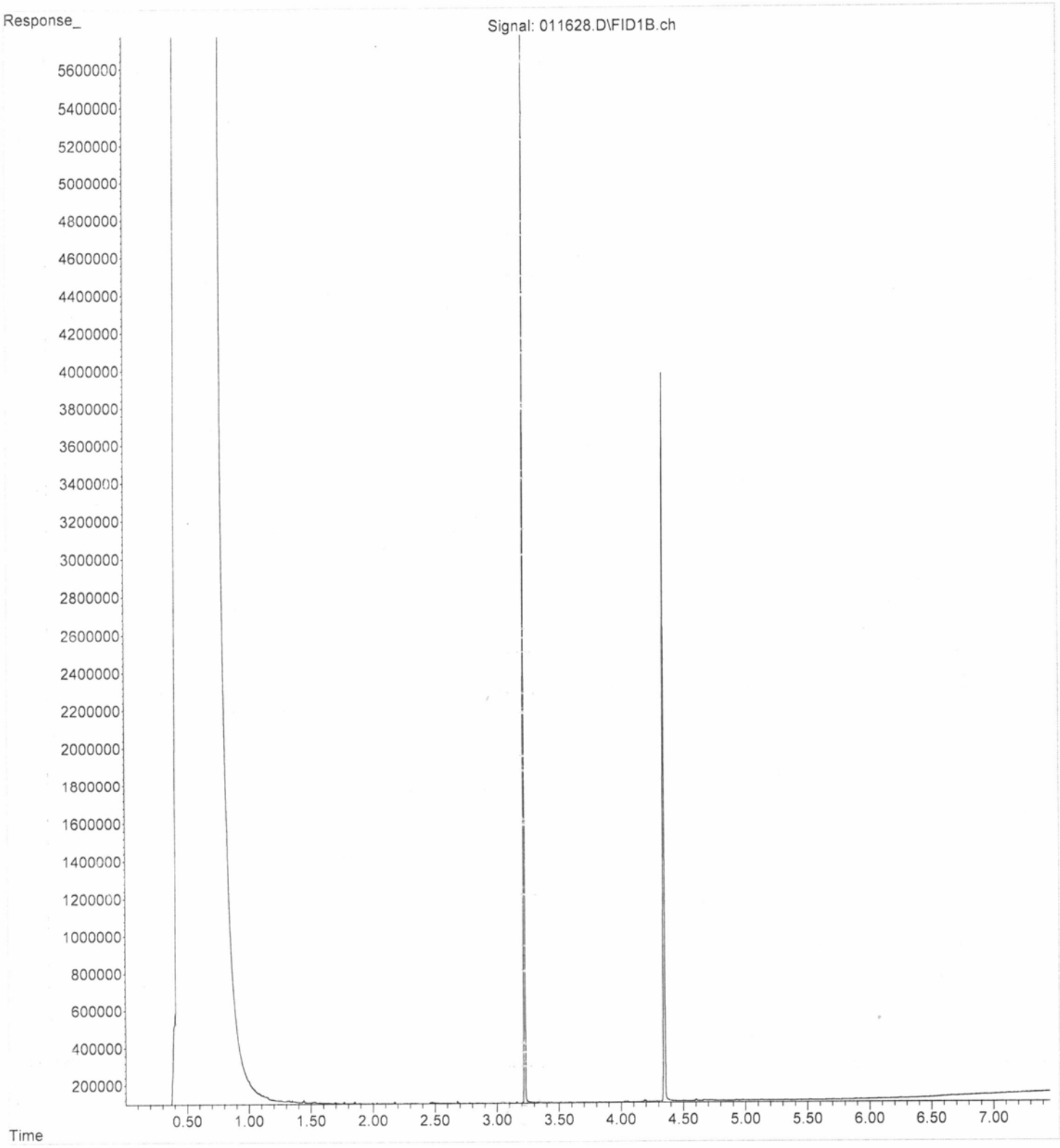
File :P:\Proc_GC13\01-16-25\011627.D
Operator : TL
Acquired : 16 Jan 2025 04:14 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501132-13
Misc Info :
Vial Number: 26

ERR



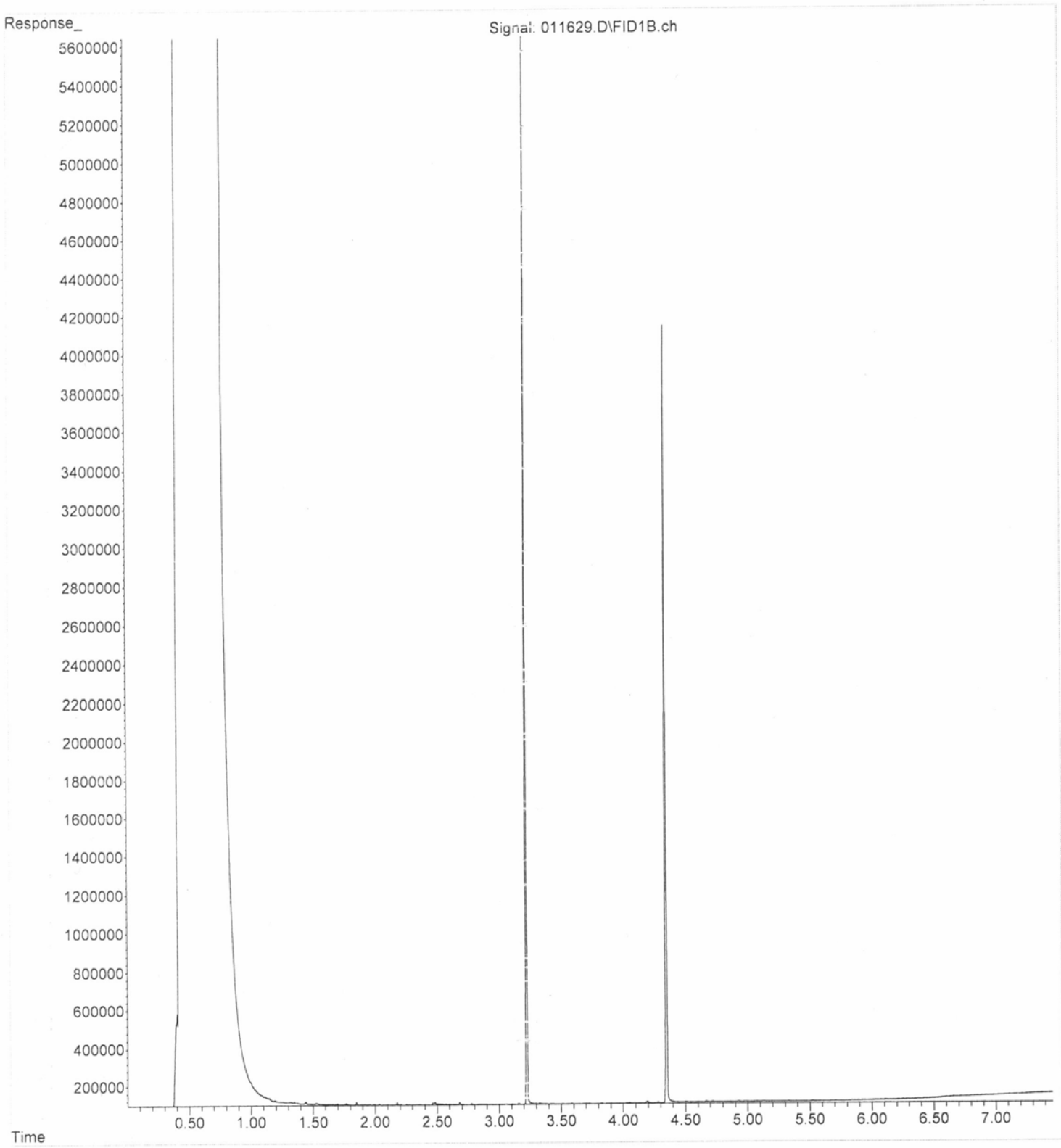
File :P:\Proc_GC13\01-16-25\011628.D
Operator : TL
Acquired : 16 Jan 2025 04:26 pm using AcqMethod Dx M
Instrument : GC13
Sample Name: 501132-14
Misc Info :
Vial Number: 27

ERR



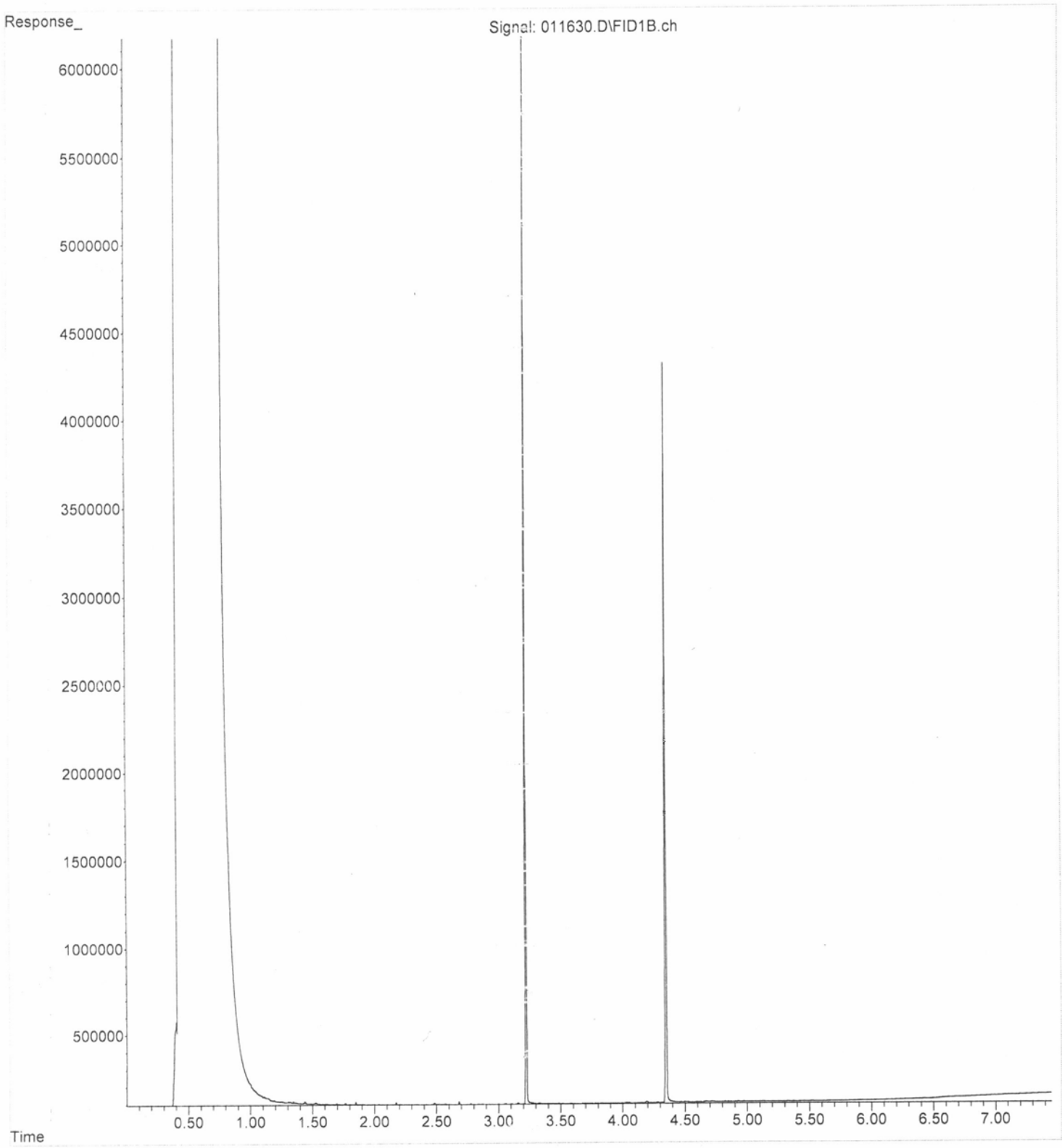
File :P:\Proc_GC13\01-16-25\011629.D
Operator : TL
Acquired : 16 Jan 2025 04:37 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501132-16
Misc Info :
Vial Number: 28

ERR



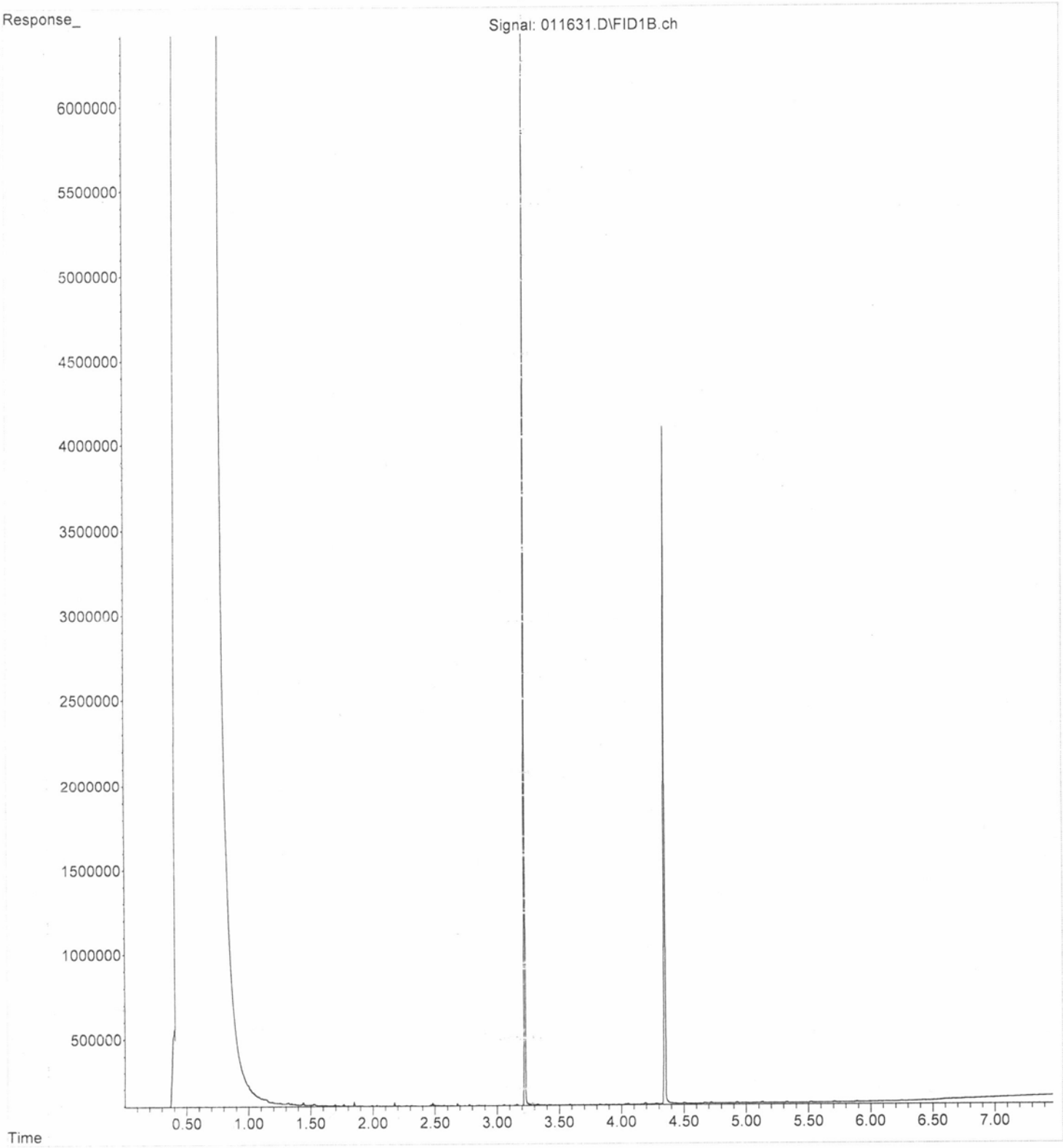
File :P:\Proc_GC13\01-16-25\011630.D
Operator : TL
Acquired : 16 Jan 2025 04:48 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501132-18
Misc Info :
Vial Number: 29

ERR



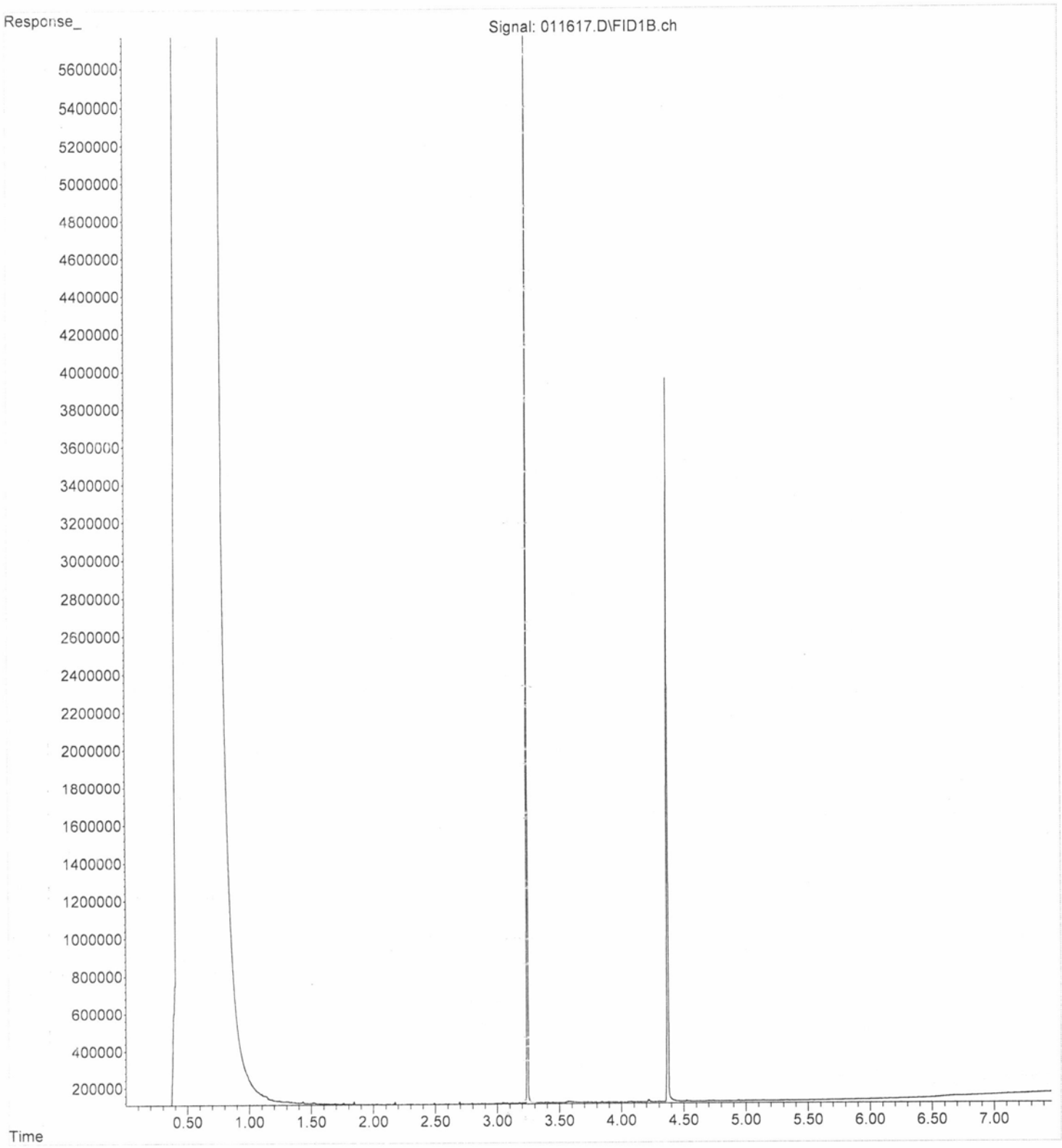
File :P:\Proc_GC13\01-16-25\011631.D
Operator : TL
Acquired : 16 Jan 2025 04:59 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 501132-20
Misc Info :
Vial Number: 30

ERR



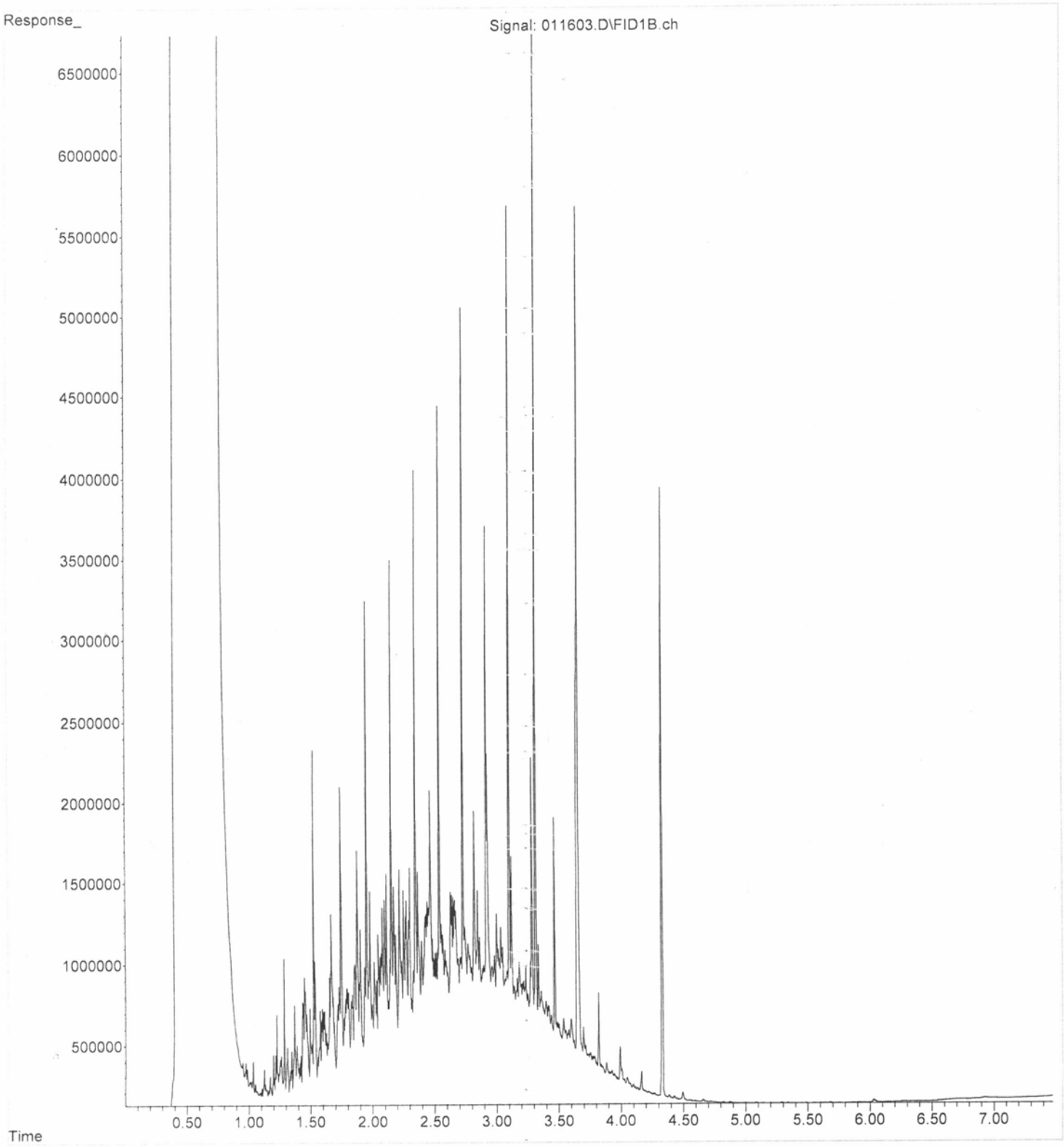
File :P:\Proc_GC13\01-16-25\011617.D
Operator : TL
Acquired : 16 Jan 2025 02:22 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 05-199 mb
Misc Info :
Vial Number: 16

ERR



File : P:\Proc_GC13\01-16-25\011603.D
Operator : TL
Acquired : 16 Jan 2025 08:17 am using AcqMethod Dx.M
Instrument : GC13
Sample Name: 500 Dx 74-61B
Misc Info :
Vial Number: 3

ERR



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

Friedman & Bruya
Michael Erdahl
5500 4th Ave S
Seattle, WA 98108

RE: 501132,
Work Order Number: 2501393

January 29, 2025

Attention Michael Erdahl:

Alliance Technical Group, LLC - Seattle received 1 sample(s) on 1/22/2025 for the analyses presented in the following report.

Hexavalent Chromium by EPA 7196A
Sample Moisture (Percent Moisture)

All analyses were performed according to our accredited Quality Assurance program. Please contact the laboratory if you should have any questions about the results.

Alliance Technical Group is committed to accuracy, speed, and customer service. Thank you for choosing Alliance Technical Group's Seattle laboratory team for your analytical needs. We appreciate this opportunity to serve you!

Sincerely,

Kelley Lovejoy
Project Manager

DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 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

Date: *01/29/2025*

CLIENT: Friedman & Bruya
Project: 501132
Work Order: 2501393

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2501393-001	AB-06-33	01/09/2025 11:50 AM	01/22/2025 3:13 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Original

Case Narrative

WO#: **2501393**

Date: **1/29/2025**

CLIENT: Friedman & Bruya
Project: 501132

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: **2501393**
Date Reported: **1/29/2025**

CLIENT: Friedman & Bruya
Project: 501132

Lab ID: 2501393-001 **Collection Date:** 1/9/2025 11:50:00 AM
Client Sample ID: **AB-06-33** **Matrix:** Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Sample Moisture (Percent Moisture)				Batch ID: R97129		Analyst: EC
Percent Moisture	15.5	0.500		wt%	1	1/23/2025 8:07:29 AM
Hexavalent Chromium by EPA 7196A				Batch ID: 46573		Analyst: NR
Chromium, Hexavalent	1.52	0.583		mg/Kg-dry	1	1/29/2025 12:57:00 PM

Work Order: 2501393
CLIENT: Friedman & Bruya
Project: 501132

QC SUMMARY REPORT

Hexavalent Chromium by EPA 7196A

Sample ID: **MB-46573**	SampType: **MBLK**			Units: **mg/Kg**		Prep Date: **1/27/2025**		RunNo: **97273**		
Client ID: **MBLKS**	Batch ID: **46573**					Analysis Date: **1/29/2025**		SeqNo: **2027194**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.500									

Sample ID: **LCS-46573**	SampType: **LCS**			Units: **mg/Kg**		Prep Date: **1/27/2025**		RunNo: **97273**		
Client ID: **LCSS**	Batch ID: **46573**					Analysis Date: **1/29/2025**		SeqNo: **2027195**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	10.7	0.500	12.87	0	83.3	65.1	105				

Sample ID: **2501400-006ADUP**	SampType: **DUP**			Units: **mg/Kg-dry**		Prep Date: **1/27/2025**		RunNo: **97273**		
Client ID: **BATCH**	Batch ID: **46573**					Analysis Date: **1/29/2025**		SeqNo: **2027197**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.548						0		30	

Sample ID: **2501400-006AMS1**	SampType: **MS**			Units: **mg/Kg-dry**		Prep Date: **1/27/2025**		RunNo: **97273**		
Client ID: **BATCH**	Batch ID: **46573**					Analysis Date: **1/29/2025**		SeqNo: **2027198**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	11.2	0.544	13.99	0	79.7	32	106				

Sample ID: **2501400-006AMS2**	SampType: **MS**			Units: **mg/Kg-dry**		Prep Date: **1/27/2025**		RunNo: **97273**		
Client ID: **BATCH**	Batch ID: **46573**					Analysis Date: **1/29/2025**		SeqNo: **2027199**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	9.63	0.548	10.96	0	87.9	32	106				

Sample Log-In Check List

Client Name:	FB	Work Order Number:	2501393
Logged by:	Clare Griggs	Date Received:	1/22/2025 3:13:00 PM

Chain of Custody

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

Log In

3.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☐	Not Present ☑
4.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5.	Were all items received at a temperature of >2°C to 6°C *	Yes ☑	No ☐	NA ☐
6.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
7.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8.	Are samples properly preserved?	Yes ☑	No ☐	
9.	Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10.	Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
11.	Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
12.	Does paperwork match bottle labels?	Yes ☑	No ☐	
13.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14.	Is it clear what analyses were requested?	Yes ☑	No ☐	
15.	Were all hold times (except field parameters, pH e.g.) able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

16. 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:			

17. Additional remarks:

Item Information

Item #	Temp ºC
Sample	5.4

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

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

250/393

Send Report To Michael Erdahl
Company Friedman and Bruya, Inc.
Address 5500 4th Ave S
City, State, ZIP Seattle, WA 98108
Phone # (206) 285-8282 merdahl@friedmanandbruya.com

SUBCONTRACTER
ATG

PROJECT NAME/NO.	PO #
501132	F-33

REMARKS
Aspect EDD

TURNAROUND TIME
☒ Standard TAT
☐ RUSH
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: Cr VI										Notes
AB-06-33		1/9/2025	1150	soil	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	1/22/25	1336
Received by:		gina gerard	ATG	1/22/25	3:13PM
Relinquished by:					
Received by:					

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

January 30, 2025

Ali Cochrane, Project Manager
Aspect Consulting
710 2nd Ave S, Suite 550
Seattle, WA 98104

Dear Ms Cochrane:

Included are the results from the testing of material submitted on January 15, 2025 from the Mercy Housing AS220138B, F&BI 501194 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: Aspect Data, Hannah Cohen
ASP0130R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 15, 2025 by Friedman & Bruya, Inc. from the Aspect Consulting Mercy Housing AS220138B, F&BI 501194 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Aspect Consulting
501194 -01	AB-07-1.5
501194 -02	AB-07-3
501194 -03	AB-07-7
501194 -04	AB-07-8.5
501194 -05	AB-07-12
501194 -06	AB-07-14
501194 -07	AB-07-16
501194 -08	AB-07-17.5
501194 -09	AB-07-22
501194 -10	AB-07-27.5
501194 -11	AB-07-33
501194 -12	AB-07-37
501194 -13	AB-07-42
501194 -14	AB-07-49
501194 -15	AB-07-52
501194 -16	AB-07-57.5
501194 -17	AB-07-63
501194 -18	AB-102-42

Samples AB-07-3 and AB-07-8.5 were sent to Alliance Technical Group for asbestos testing. The report is enclosed.

The 8260D calibration, matrix spike, and laboratory control sample standard did not meet the acceptance criteria for several analytes. The data were flagged accordingly.

Samples AB-07-3, AB-07-7, AB-07-12 and AB-07-17.5 were analyzed outside of the holding time. The results were qualified accordingly.

The 8270E calibration standard did not meet the acceptance criteria for 2-nitroaniline. The data were flagged accordingly.

All other quality control requirements were acceptable.

Date of Report: 01/30/25
Date Received: 01/15/25
Project: Mercy Housing AS220138B, F&BI 501194
Date Extracted: 01/24/25
Date Analyzed: 01/24/25

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)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
AB-07-3 501194-02	<5	87
AB-07-7 501194-03	<5	91
AB-07-12 501194-05	<5	94
AB-07-17.5 501194-08	<5	88
AB-07-27.5 501194-10	<5	90
AB-07-37 501194-12	<5	99
AB-07-42 501194-13	<5	93
AB-07-57.5 501194-16	<5	95
AB-07-63 501194-17	<5	91
AB-102-42 501194-18	<5	99
Method Blank 05-059 MB	<5	98

Date of Report: 01/30/25
Date Received: 01/15/25
Project: Mercy Housing AS220138B, F&BI 501194
Date Extracted: 01/23/25
Date Analyzed: 01/23/25

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)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
AB-07-3 501194-02	<50	<250	81
AB-07-7 501194-03	<50	<250	83
AB-07-12 501194-05	<50	<250	84
AB-07-17.5 501194-08	<50	<250	84
AB-07-27.5 501194-10	<50	<250	82
AB-07-37 501194-12	<50	<250	83
AB-07-42 501194-13	<50	<250	83
AB-07-57.5 501194-16	<50	<250	81
AB-07-63 501194-17	<50	<250	89
AB-102-42 501194-18	<50	<250	85
Method Blank 05-228 MB	<50	<250	79

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-07-3 ht	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/29/25	Lab ID:	501194-02 1/0.5
Date Analyzed:	01/29/25	Data File:	012910.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	84	120
Toluene-d8	100	73	128
4-Bromofluorobenzene	105	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4 k	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-07-7 ht	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/29/25	Lab ID:	501194-03 1/0.5
Date Analyzed:	01/29/25	Data File:	012911.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	92	84	120
Toluene-d8	99	73	128
4-Bromofluorobenzene	105	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4 k	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-07-12 ht	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/29/25	Lab ID:	501194-05 1/0.5
Date Analyzed:	01/29/25	Data File:	012912.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	107	84	120
Toluene-d8	100	73	128
4-Bromofluorobenzene	107	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4 k	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-07-17.5 ht	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/29/25	Lab ID:	501194-08 1/0.5
Date Analyzed:	01/29/25	Data File:	012913.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	91	84	120
Toluene-d8	98	73	128
4-Bromofluorobenzene	104	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4 k	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-07-27.5	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/28/25	Lab ID:	501194-10 1/0.5
Date Analyzed:	01/28/25	Data File:	012824.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	111	79	128
Toluene-d8	97	84	121
4-Bromofluorobenzene	97	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 jl	1,3-Dichloropropane	<0.05
Chloromethane	<0.5 jl	Tetrachloroethene	<0.002
Vinyl chloride	<0.002 jl	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5 jl	Ethylbenzene	<0.002
Acetone	<5 k	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 k	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1 k		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-07-37	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/28/25	Lab ID:	501194-12 1/0.5
Date Analyzed:	01/28/25	Data File:	012825.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	79	128
Toluene-d8	95	84	121
4-Bromofluorobenzene	104	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 jl	1,3-Dichloropropane	<0.05
Chloromethane	<0.5 jl	Tetrachloroethene	<0.002
Vinyl chloride	<0.002 jl	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5 jl	Ethylbenzene	<0.002
Acetone	<5 k	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 k	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1 k		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-07-42	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/28/25	Lab ID:	501194-13 1/0.5
Date Analyzed:	01/28/25	Data File:	012826.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	79	128
Toluene-d8	90	84	121
4-Bromofluorobenzene	96	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 jl	1,3-Dichloropropane	<0.05
Chloromethane	<0.5 jl	Tetrachloroethene	<0.002
Vinyl chloride	<0.002 jl	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5 jl	Ethylbenzene	<0.002
Acetone	<5 k	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 k	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1 k		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-07-57.5	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/28/25	Lab ID:	501194-16 1/0.5
Date Analyzed:	01/28/25	Data File:	012827.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	92	79	128
Toluene-d8	97	84	121
4-Bromofluorobenzene	101	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 jl	1,3-Dichloropropane	<0.05
Chloromethane	<0.5 jl	Tetrachloroethene	<0.002
Vinyl chloride	<0.002 jl	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5 jl	Ethylbenzene	<0.002
Acetone	<5 k	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 k	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1 k		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-07-63	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/28/25	Lab ID:	501194-17 1/0.5
Date Analyzed:	01/28/25	Data File:	012828.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	79	128
Toluene-d8	96	84	121
4-Bromofluorobenzene	103	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 jl	1,3-Dichloropropane	<0.05
Chloromethane	<0.5 jl	Tetrachloroethene	<0.002
Vinyl chloride	<0.002 jl	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5 jl	Ethylbenzene	<0.002
Acetone	<5 k	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 k	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1 k		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-102-42	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/28/25	Lab ID:	501194-18 1/0.5
Date Analyzed:	01/28/25	Data File:	012829.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	79	128
Toluene-d8	94	84	121
4-Bromofluorobenzene	96	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 jl	1,3-Dichloropropane	<0.05
Chloromethane	<0.5 jl	Tetrachloroethene	<0.002
Vinyl chloride	<0.002 jl	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5 jl	Ethylbenzene	<0.002
Acetone	<5 k	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 k	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1 k		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	Method Blank	Client:	Aspect Consulting
Date Received:	Not Applicable	Project:	Mercy Housing AS220138B
Date Extracted:	01/28/25	Lab ID:	05-0241 mb 1/0.5
Date Analyzed:	01/28/25	Data File:	012806.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	93	79	128
Toluene-d8	94	84	121
4-Bromofluorobenzene	103	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 jl	1,3-Dichloropropane	<0.05
Chloromethane	<0.5 jl	Tetrachloroethene	<0.002
Vinyl chloride	<0.002 jl	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5 jl	Ethylbenzene	<0.002
Acetone	<5 k	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 k	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1 k		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	Method Blank	Client:	Aspect Consulting
Date Received:	Not Applicable	Project:	Mercy Housing AS220138B
Date Extracted:	01/29/25	Lab ID:	05-0249 mb 1/0.5
Date Analyzed:	01/29/25	Data File:	012906.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	79	128
Toluene-d8	97	84	121
4-Bromofluorobenzene	108	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 k	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 k	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1 k		

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-07-3	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501194-02 1/5
Date Analyzed:	01/23/25	Data File:	012310.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	75	14	115
Phenol-d6	85	29	121
Nitrobenzene-d5	87	16	137
2-Fluorobiphenyl	90	46	122
2,4,6-Tribromophenol	80	17	154
Terphenyl-d14	81	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	0.0042
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	0.0067
Naphthalene	<0.005	Pyrene	0.0071
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	0.0040
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	0.0046
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	0.0054
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25 ca	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-07-7	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501194-03 1/5
Date Analyzed:	01/23/25	Data File:	012311.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	73	14	115
Phenol-d6	85	29	121
Nitrobenzene-d5	87	16	137
2-Fluorobiphenyl	90	46	122
2,4,6-Tribromophenol	82	17	154
Terphenyl-d14	83	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25 ca	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-07-12	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501194-05 1/5
Date Analyzed:	01/23/25	Data File:	012312.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	69	14	115
Phenol-d6	80	29	121
Nitrobenzene-d5	82	16	137
2-Fluorobiphenyl	85	46	122
2,4,6-Tribromophenol	78	17	154
Terphenyl-d14	79	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	0.0060
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	0.0045
Naphthalene	<0.005	Pyrene	0.0053
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	0.0027
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25 ca	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-07-17.5	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501194-08 1/5
Date Analyzed:	01/23/25	Data File:	012313.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	72	14	115
Phenol-d6	85	29	121
Nitrobenzene-d5	86	16	137
2-Fluorobiphenyl	91	46	122
2,4,6-Tribromophenol	86	17	154
Terphenyl-d14	86	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	0.0038
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25 ca	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-07-27.5	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501194-10 1/5
Date Analyzed:	01/23/25	Data File:	012314.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	74	14	115
Phenol-d6	87	29	121
Nitrobenzene-d5	89	16	137
2-Fluorobiphenyl	94	46	122
2,4,6-Tribromophenol	88	17	154
Terphenyl-d14	86	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	0.0029
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25 ca	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-07-37	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501194-12 1/5
Date Analyzed:	01/23/25	Data File:	012315.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	68	14	115
Phenol-d6	79	29	121
Nitrobenzene-d5	80	16	137
2-Fluorobiphenyl	83	46	122
2,4,6-Tribromophenol	83	17	154
Terphenyl-d14	77	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25 ca	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-07-42	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501194-13 1/5
Date Analyzed:	01/23/25	Data File:	012316.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	72	14	115
Phenol-d6	83	29	121
Nitrobenzene-d5	83	16	137
2-Fluorobiphenyl	86	46	122
2,4,6-Tribromophenol	84	17	154
Terphenyl-d14	78	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	0.0029
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25 ca	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-07-57.5	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501194-16 1/5
Date Analyzed:	01/23/25	Data File:	012317.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	72	14	115
Phenol-d6	82	29	121
Nitrobenzene-d5	83	16	137
2-Fluorobiphenyl	86	46	122
2,4,6-Tribromophenol	78	17	154
Terphenyl-d14	79	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25 ca	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-07-63	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501194-17 1/5
Date Analyzed:	01/23/25	Data File:	012318.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	71	14	115
Phenol-d6	82	29	121
Nitrobenzene-d5	83	16	137
2-Fluorobiphenyl	89	46	122
2,4,6-Tribromophenol	86	17	154
Terphenyl-d14	81	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	0.0033
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	0.0037
Naphthalene	<0.005	Pyrene	0.0041
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	0.0026
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25 ca	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-102-42	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501194-18 1/5
Date Analyzed:	01/23/25	Data File:	012319.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	69	14	115
Phenol-d6	80	29	121
Nitrobenzene-d5	80	16	137
2-Fluorobiphenyl	84	46	122
2,4,6-Tribromophenol	82	17	154
Terphenyl-d14	76	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25 ca	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	Aspect Consulting
Date Received:	Not Applicable	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	05-0226 mb 1/5
Date Analyzed:	01/23/25	Data File:	012309.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	88	14	115
Phenol-d6	100	29	121
Nitrobenzene-d5	103	16	137
2-Fluorobiphenyl	107	46	122
2,4,6-Tribromophenol	95	17	154
Terphenyl-d14	97	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25 ca	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-07-3	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501194-02
Date Analyzed:	01/23/25	Data File:	501194-02.113
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.8
Barium	30
Cadmium	<1
Chromium	12
Lead	5.9
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-07-7	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501194-03
Date Analyzed:	01/23/25	Data File:	501194-03.116
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.7
Barium	33
Cadmium	<1
Chromium	12
Lead	2.2
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-07-12	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501194-05
Date Analyzed:	01/23/25	Data File:	501194-05.117
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.1
Barium	45
Cadmium	<1
Chromium	14
Lead	4.2
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-07-17.5	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501194-08
Date Analyzed:	01/23/25	Data File:	501194-08.120
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.0
Barium	42
Cadmium	<1
Chromium	22
Lead	4.5
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-07-27.5	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501194-10
Date Analyzed:	01/23/25	Data File:	501194-10.121
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.3
Barium	41
Cadmium	<1
Chromium	7.9
Lead	1.8
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-07-37	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501194-12
Date Analyzed:	01/23/25	Data File:	501194-12.122
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.0
Barium	38
Cadmium	<1
Chromium	14
Lead	3.0
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-07-42	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501194-13
Date Analyzed:	01/23/25	Data File:	501194-13.123
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.3
Barium	45
Cadmium	<1
Chromium	19
Lead	3.0
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-07-57.5	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501194-16
Date Analyzed:	01/23/25	Data File:	501194-16.124
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.9
Barium	45
Cadmium	<1
Chromium	18
Lead	2.2
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-07-63	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501194-17
Date Analyzed:	01/23/25	Data File:	501194-17.125
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.0
Barium	42
Cadmium	<1
Chromium	18
Lead	4.1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-102-42	Client:	Aspect Consulting
Date Received:	01/15/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501194-18
Date Analyzed:	01/23/25	Data File:	501194-18.126
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.4
Barium	49
Cadmium	<1
Chromium	18
Lead	3.2
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Aspect Consulting
Date Received:	NA	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	I5-62 mb
Date Analyzed:	01/23/25	Data File:	I5-62 mb.102
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Date of Report: 01/30/25
Date Received: 01/15/25
Project: Mercy Housing AS220138B, F&BI 501194

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TPH AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code: 501194-02 (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)	40	85	70-130

Date of Report: 01/30/25
Date Received: 01/15/25
Project: Mercy Housing AS220138B, F&BI 501194

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 501231-02 (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	<50	110	108	63-146	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	100	77-123

Date of Report: 01/30/25
Date Received: 01/15/25
Project: Mercy Housing AS220138B, F&BI 501194

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 501318-10 (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	<0.5	43 vo	45 vo	50-150	5
Chloromethane	mg/kg (ppm)	2	<0.5	62	62	50-150	0
Vinyl chloride	mg/kg (ppm)	2	<0.05	67	70	50-150	4
Bromomethane	mg/kg (ppm)	2	<0.5	53	56	50-150	6
Chloroethane	mg/kg (ppm)	2	<0.5	63	64	50-150	2
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	66	71	50-150	7
Acetone	mg/kg (ppm)	10	<5	191 vo	150	50-150	24 vo
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	79	79	50-150	0
Hexane	mg/kg (ppm)	2	<0.25	69	71	50-150	3
Methylene chloride	mg/kg (ppm)	2	<0.5	70	68	50-150	3
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	81	81	50-150	0
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	75	75	50-150	0
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	80	80	50-150	0
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	69	68	50-150	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	78	78	50-150	0
Chloroform	mg/kg (ppm)	2	<0.05	80	78	50-150	3
2-Butanone (MEK)	mg/kg (ppm)	10	<1	147	110	50-150	29 vo
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	86	82	50-150	5
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	80	81	50-150	1
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	79	80	50-150	1
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	80	81	50-150	1
Benzene	mg/kg (ppm)	2	<0.03	85	82	50-150	4
Trichloroethene	mg/kg (ppm)	2	<0.02	81	75	50-150	8
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	78	77	50-150	1
Bromodichloromethane	mg/kg (ppm)	2	<0.05	83	75	50-150	10
Dibromomethane	mg/kg (ppm)	2	<0.05	80	78	50-150	3
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	82	79	50-150	4
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	84	76	50-150	10
Toluene	mg/kg (ppm)	2	<0.05	82	81	50-150	1
trans-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	75	73	50-150	3
1,1,2-Trichloroethane	mg/kg (ppm)	2	<0.05	85	82	50-150	4
2-Hexanone	mg/kg (ppm)	10	<1	111	92	50-150	19
1,3-Dichloropropane	mg/kg (ppm)	2	<0.05	75	76	50-150	1
Tetrachloroethene	mg/kg (ppm)	2	<0.025	81	80	50-150	1
Dibromochloromethane	mg/kg (ppm)	2	<0.05	79	80	50-150	1
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	85	82	50-150	4
Chlorobenzene	mg/kg (ppm)	2	<0.05	77	77	50-150	0
Ethylbenzene	mg/kg (ppm)	2	<0.05	84	84	50-150	0
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	75	75	50-150	0
m,p-Xylene	mg/kg (ppm)	4	<0.1	82	83	50-150	1
o-Xylene	mg/kg (ppm)	2	<0.05	81	84	50-150	4
Styrene	mg/kg (ppm)	2	<0.05	78	78	50-150	0
Isopropylbenzene	mg/kg (ppm)	2	<0.05	78	81	50-150	4
Bromoform	mg/kg (ppm)	2	<0.05	76	74	50-150	3
n-Propylbenzene	mg/kg (ppm)	2	<0.05	83	81	50-150	2
Bromobenzene	mg/kg (ppm)	2	<0.05	83	78	50-150	6
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	82	84	50-150	2
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	85	87	50-150	2
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	87	84	50-150	4
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	83	79	50-150	5
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	84	82	50-150	2
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	83	83	50-150	0
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	<0.05	85	82	50-150	4
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	82	83	50-150	1
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	83	84	50-150	1
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	81	80	50-150	1
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	82	81	50-150	1
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	84	83	50-150	1
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	81	82	50-150	1
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	82	85	50-150	4
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	76	83	50-150	9
Naphthalene	mg/kg (ppm)	2	<0.05	82	82	50-150	0
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	80	86	50-150	7

Date of Report: 01/30/25
Date Received: 01/15/25
Project: Mercy Housing AS220138B, F&BI 501194

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2	0 vo	10-150
Chloromethane	mg/kg (ppm)	2	5 vo	21-140
Vinyl chloride	mg/kg (ppm)	2	14 vo	35-135
Bromomethane	mg/kg (ppm)	2	27	20-151
Chloroethane	mg/kg (ppm)	2	36	21-147
Trichlorofluoromethane	mg/kg (ppm)	2	46 vo	47-143
Acetone	mg/kg (ppm)	10	105	13-169
1,1-Dichloroethene	mg/kg (ppm)	2	65	49-138
Hexane	mg/kg (ppm)	2	63	61-141
Methylene chloride	mg/kg (ppm)	2	82	25-146
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	83	65-129
trans-1,2-Dichloroethene	mg/kg (ppm)	2	77	62-126
1,1-Dichloroethane	mg/kg (ppm)	2	85	64-131
2,2-Dichloropropane	mg/kg (ppm)	2	93	76-150
cis-1,2-Dichloroethene	mg/kg (ppm)	2	86	62-127
Chloroform	mg/kg (ppm)	2	91	67-129
2-Butanone (MEK)	mg/kg (ppm)	10	110	19-171
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	90	73-123
1,1,1-Trichloroethane	mg/kg (ppm)	2	91	66-125
1,1-Dichloropropene	mg/kg (ppm)	2	86	70-131
Carbon tetrachloride	mg/kg (ppm)	2	88	53-135
Benzene	mg/kg (ppm)	2	90	70-130
Trichloroethene	mg/kg (ppm)	2	88	62-116
1,2-Dichloropropane	mg/kg (ppm)	2	85	70-130
Bromodichloromethane	mg/kg (ppm)	2	92	70-130
Dibromomethane	mg/kg (ppm)	2	86	70-130
4-Methyl-2-pentanone	mg/kg (ppm)	10	95	64-137
cis-1,3-Dichloropropene	mg/kg (ppm)	2	92	68-137
Toluene	mg/kg (ppm)	2	97	70-130
trans-1,3-Dichloropropene	mg/kg (ppm)	2	90	70-130
1,1,2-Trichloroethane	mg/kg (ppm)	2	98	70-130
2-Hexanone	mg/kg (ppm)	10	117	55-145
1,3-Dichloropropane	mg/kg (ppm)	2	90	70-130
Tetrachloroethene	mg/kg (ppm)	2	96	69-131
Dibromochloromethane	mg/kg (ppm)	2	92	61-137
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	98	70-130
Chlorobenzene	mg/kg (ppm)	2	92	70-130
Ethylbenzene	mg/kg (ppm)	2	103	70-130
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	94	56-134
m,p-Xylene	mg/kg (ppm)	4	101	70-130
o-Xylene	mg/kg (ppm)	2	102	70-130
Styrene	mg/kg (ppm)	2	94	70-130
Isopropylbenzene	mg/kg (ppm)	2	99	67-131
Bromoform	mg/kg (ppm)	2	96	70-130
n-Propylbenzene	mg/kg (ppm)	2	96	70-130
Bromobenzene	mg/kg (ppm)	2	95	70-130
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	95	70-130
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	98	70-130
1,2,3-Trichloropropane	mg/kg (ppm)	2	97	70-130
2-Chlorotoluene	mg/kg (ppm)	2	93	70-130
4-Chlorotoluene	mg/kg (ppm)	2	96	70-130
tert-Butylbenzene	mg/kg (ppm)	2	97	70-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	96	70-130
sec-Butylbenzene	mg/kg (ppm)	2	98	68-131
p-Isopropyltoluene	mg/kg (ppm)	2	98	70-130
1,3-Dichlorobenzene	mg/kg (ppm)	2	93	70-130
1,4-Dichlorobenzene	mg/kg (ppm)	2	94	70-130
1,2-Dichlorobenzene	mg/kg (ppm)	2	96	70-130
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	87	70-130
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	87	66-140
Hexachlorobutadiene	mg/kg (ppm)	2	90	67-141
Naphthalene	mg/kg (ppm)	2	84	69-119
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	83	66-138

Date of Report: 01/30/25
Date Received: 01/15/25
Project: Mercy Housing AS220138B, F&BI 501194

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 501232-03 (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	<0.5	42 vo	45 vo	50-150	7
Chloromethane	mg/kg (ppm)	2	<0.5	59	60	50-150	2
Vinyl chloride	mg/kg (ppm)	2	<0.05	67	70	50-150	4
Bromomethane	mg/kg (ppm)	2	<0.5	65	68	50-150	5
Chloroethane	mg/kg (ppm)	2	<0.5	67	69	50-150	3
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	64	69	50-150	8
Acetone	mg/kg (ppm)	10	<5	121	145	50-150	18
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	76	80	50-150	5
Hexane	mg/kg (ppm)	2	<0.25	67	68	50-150	1
Methylene chloride	mg/kg (ppm)	2	<0.5	71	77	50-150	8
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	77	82	50-150	6
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	71	77	50-150	8
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	77	81	50-150	5
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	66	73	50-150	10
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	74	78	50-150	5
Chloroform	mg/kg (ppm)	2	<0.05	79	79	50-150	0
2-Butanone (MEK)	mg/kg (ppm)	10	<1	106	127	50-150	18
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	82	83	50-150	1
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	78	83	50-150	6
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	75	81	50-150	8
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	77	81	50-150	5
Benzene	mg/kg (ppm)	2	<0.03	82	83	50-150	1
Trichloroethene	mg/kg (ppm)	2	<0.02	82	83	50-150	1
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	74	77	50-150	4
Bromodichloromethane	mg/kg (ppm)	2	<0.05	75	77	50-150	3
Dibromomethane	mg/kg (ppm)	2	<0.05	77	80	50-150	4
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	77	80	50-150	4
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	73	68	50-150	7
Toluene	mg/kg (ppm)	2	<0.05	87	84	50-150	4
trans-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	73	66	50-150	10
1,1,2-Trichloroethane	mg/kg (ppm)	2	<0.05	89	86	50-150	3
2-Hexanone	mg/kg (ppm)	10	<1	109	115	50-150	5
1,3-Dichloropropane	mg/kg (ppm)	2	<0.05	81	77	50-150	5
Tetrachloroethene	mg/kg (ppm)	2	<0.025	85	83	50-150	2
Dibromochloromethane	mg/kg (ppm)	2	<0.05	76	73	50-150	4
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	89	85	50-150	5
Chlorobenzene	mg/kg (ppm)	2	<0.05	79	79	50-150	0
Ethylbenzene	mg/kg (ppm)	2	<0.05	86	86	50-150	0
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	78	80	50-150	3
m,p-Xylene	mg/kg (ppm)	4	<0.1	84	84	50-150	0
o-Xylene	mg/kg (ppm)	2	<0.05	83	85	50-150	2
Styrene	mg/kg (ppm)	2	<0.05	78	79	50-150	1
Isopropylbenzene	mg/kg (ppm)	2	<0.05	79	82	50-150	4
Bromoform	mg/kg (ppm)	2	<0.05	64	61	50-150	5
n-Propylbenzene	mg/kg (ppm)	2	<0.05	82	89	50-150	8
Bromobenzene	mg/kg (ppm)	2	<0.05	84	89	50-150	6
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	84	90	50-150	7
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	81	88	50-150	8
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	87	91	50-150	4
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	80	85	50-150	6
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	83	90	50-150	8
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	86	92	50-150	7
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	<0.05	82	90	50-150	9
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	82	90	50-150	9
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	81	91	50-150	12
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	79	87	50-150	10
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	83	88	50-150	6
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	82	88	50-150	7
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	76	83	50-150	9
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	77	90	50-150	16
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	76	87	50-150	13
Naphthalene	mg/kg (ppm)	2	<0.05	77	86	50-150	11
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	75	87	50-150	15

Date of Report: 01/30/25
Date Received: 01/15/25
Project: Mercy Housing AS220138B, F&BI 501194

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2	43	10-150
Chloromethane	mg/kg (ppm)	2	48	21-140
Vinyl chloride	mg/kg (ppm)	2	58	35-135
Bromomethane	mg/kg (ppm)	2	58	20-151
Chloroethane	mg/kg (ppm)	2	60	21-147
Trichlorofluoromethane	mg/kg (ppm)	2	63	47-143
Acetone	mg/kg (ppm)	10	94	13-169
1,1-Dichloroethene	mg/kg (ppm)	2	75	49-138
Hexane	mg/kg (ppm)	2	70	61-141
Methylene chloride	mg/kg (ppm)	2	87	25-146
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	89	65-129
trans-1,2-Dichloroethene	mg/kg (ppm)	2	79	62-126
1,1-Dichloroethane	mg/kg (ppm)	2	88	64-131
2,2-Dichloropropane	mg/kg (ppm)	2	95	76-150
cis-1,2-Dichloroethene	mg/kg (ppm)	2	88	62-127
Chloroform	mg/kg (ppm)	2	94	67-129
2-Butanone (MEK)	mg/kg (ppm)	10	95	19-171
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	94	73-123
1,1,1-Trichloroethane	mg/kg (ppm)	2	92	66-125
1,1-Dichloropropene	mg/kg (ppm)	2	86	70-131
Carbon tetrachloride	mg/kg (ppm)	2	90	53-135
Benzene	mg/kg (ppm)	2	91	70-130
Trichloroethene	mg/kg (ppm)	2	87	62-116
1,2-Dichloropropane	mg/kg (ppm)	2	88	70-130
Bromodichloromethane	mg/kg (ppm)	2	92	70-130
Dibromomethane	mg/kg (ppm)	2	86	70-130
4-Methyl-2-pentanone	mg/kg (ppm)	10	98	64-137
cis-1,3-Dichloropropene	mg/kg (ppm)	2	92	68-137
Toluene	mg/kg (ppm)	2	100	70-130
trans-1,3-Dichloropropene	mg/kg (ppm)	2	94	70-130
1,1,2-Trichloroethane	mg/kg (ppm)	2	103	70-130
2-Hexanone	mg/kg (ppm)	10	108	55-145
1,3-Dichloropropane	mg/kg (ppm)	2	93	70-130
Tetrachloroethene	mg/kg (ppm)	2	99	69-131
Dibromochloromethane	mg/kg (ppm)	2	97	61-137
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	101	70-130
Chlorobenzene	mg/kg (ppm)	2	94	70-130
Ethylbenzene	mg/kg (ppm)	2	106	70-130
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	100	56-134
m,p-Xylene	mg/kg (ppm)	4	104	70-130
o-Xylene	mg/kg (ppm)	2	105	70-130
Styrene	mg/kg (ppm)	2	99	70-130
Isopropylbenzene	mg/kg (ppm)	2	103	67-131
Bromoform	mg/kg (ppm)	2	95	70-130
n-Propylbenzene	mg/kg (ppm)	2	109	70-130
Bromobenzene	mg/kg (ppm)	2	107	70-130
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	113	70-130
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	120	70-130
1,2,3-Trichloropropane	mg/kg (ppm)	2	114	70-130
2-Chlorotoluene	mg/kg (ppm)	2	108	70-130
4-Chlorotoluene	mg/kg (ppm)	2	112	70-130
tert-Butylbenzene	mg/kg (ppm)	2	112	70-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	111	70-130
sec-Butylbenzene	mg/kg (ppm)	2	113	68-131
p-Isopropyltoluene	mg/kg (ppm)	2	114	70-130
1,3-Dichlorobenzene	mg/kg (ppm)	2	106	70-130
1,4-Dichlorobenzene	mg/kg (ppm)	2	109	70-130
1,2-Dichlorobenzene	mg/kg (ppm)	2	110	70-130
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	110	70-130
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	107	66-140
Hexachlorobutadiene	mg/kg (ppm)	2	107	67-141
Naphthalene	mg/kg (ppm)	2	105	69-119
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	103	66-138

Date of Report: 01/30/25
Date Received: 01/15/25
Project: Mercy Housing AS220138B, F&BI 501194

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270E

Laboratory Code: 501194-02 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Pyridine	mg/kg (ppm)	0.83	<0.5	72	64	10-99	12
Phenol	mg/kg (ppm)	0.83	<0.25	98	97	50-150	1
Bis(2-chloroethyl) ether	mg/kg (ppm)	0.83	<0.05	91	91	50-150	0
2-Chlorophenol	mg/kg (ppm)	0.83	<0.5	95	94	50-150	1
1,3-Dichlorobenzene	mg/kg (ppm)	0.83	<0.05	83	82	36-107	1
1,4-Dichlorobenzene	mg/kg (ppm)	0.83	<0.05	84	82	37-106	2
1,2-Dichlorobenzene	mg/kg (ppm)	0.83	<0.05	86	85	39-106	1
Benzyl alcohol	mg/kg (ppm)	4.2	<0.5	86	84	50-150	2
2,2'-Oxybis(1-chloropropane)	mg/kg (ppm)	0.83	<0.05	89	90	50-150	1
2-Methylphenol	mg/kg (ppm)	0.83	<0.5	97	96	50-150	1
Hexachloroethane	mg/kg (ppm)	0.83	<0.05	88	86	19-129	2
N-Nitroso-di-n-propylamine	mg/kg (ppm)	0.83	<0.05	97	97	50-150	0
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	0.83	<1	97	96	50-150	1
Nitrobenzene	mg/kg (ppm)	0.83	<0.05	94	92	50-150	2
Isophorone	mg/kg (ppm)	0.83	<0.05	103	100	16-156	3
2-Nitrophenol	mg/kg (ppm)	0.83	<0.5	92	90	50-150	2
2,4-Dimethylphenol	mg/kg (ppm)	0.83	<0.5	98	96	35-117	2
Benzoic acid	mg/kg (ppm)	2.5	<2.5	65	64	10-105	2
Bis(2-chloroethoxy)methane	mg/kg (ppm)	0.83	<0.05	100	98	50-150	2
2,4-Dichlorophenol	mg/kg (ppm)	0.83	<0.5	99	97	50-150	2
1,2,4-Trichlorobenzene	mg/kg (ppm)	0.83	<0.05	94	92	50-150	2
Naphthalene	mg/kg (ppm)	0.83	<0.005	87	85	50-150	2
Hexachlorobutadiene	mg/kg (ppm)	0.83	<0.05	82	79	39-106	4
4-Chloroaniline	mg/kg (ppm)	6.8	<5	77	77	40-101	0
4-Chloro-3-methylphenol	mg/kg (ppm)	0.83	<0.5	100	97	50-150	3
2-Methylnaphthalene	mg/kg (ppm)	0.83	<0.0025	88	85	50-150	3
1-Methylnaphthalene	mg/kg (ppm)	0.83	<0.0025	89	86	50-150	3
Hexachlorocyclopentadiene	mg/kg (ppm)	0.83	<0.15	78	89	27-127	13
2,4,6-Trichlorophenol	mg/kg (ppm)	0.83	<0.5	105	101	35-130	4
2,4,5-Trichlorophenol	mg/kg (ppm)	0.83	<0.5	98	99	43-126	1
2-Chloronaphthalene	mg/kg (ppm)	0.83	<0.05	86	85	50-150	1
2-Nitroaniline	mg/kg (ppm)	4.2	<0.25	82	81	50-150	1
Dimethyl phthalate	mg/kg (ppm)	0.83	<0.5	101	99	50-150	2
Acenaphthylene	mg/kg (ppm)	0.83	<0.0025	98	97	50-150	1
2,6-Dinitrotoluene	mg/kg (ppm)	0.83	<0.25	112	112	50-150	0
3-Nitroaniline	mg/kg (ppm)	4.2	<5	87	82	50-150	6
Acenaphthene	mg/kg (ppm)	0.83	<0.0025	92	92	50-150	0
2,4-Dinitrophenol	mg/kg (ppm)	1.7	<1.5	91	83	10-146	9
Dibenzofuran	mg/kg (ppm)	0.83	<0.0025	92	90	50-150	2
2,4-Dinitrotoluene	mg/kg (ppm)	0.83	<0.25	105	104	44-141	1
4-Nitrophenol	mg/kg (ppm)	1.7	<1.5	90	87	33-142	3
Diethyl phthalate	mg/kg (ppm)	0.83	<0.5	101	99	50-150	2
Fluorene	mg/kg (ppm)	0.83	<0.0025	92	89	50-150	3
4-Chlorophenyl phenyl ether	mg/kg (ppm)	0.83	<0.05	96	95	50-150	1
N-Nitrosodiphenylamine	mg/kg (ppm)	0.83	<0.05	104	103	50-150	1
4-Nitroaniline	mg/kg (ppm)	4.2	<5	100	98	50-150	2
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	0.83	<1.5	94	91	33-155	3
Hexachlorobenzene	mg/kg (ppm)	0.83	<0.05	92	93	50-150	1
Pentachlorophenol	mg/kg (ppm)	0.83	<0.25	89	88	15-159	1
Phenanthrene	mg/kg (ppm)	0.83	0.0038	101	92	10-170	9
Anthracene	mg/kg (ppm)	0.83	<0.0025	90	89	37-139	1
Carbazole	mg/kg (ppm)	0.83	<0.0025	94	93	50-150	1
Di-n-butyl phthalate	mg/kg (ppm)	0.83	<0.5	107	109	50-150	2
Fluoranthene	mg/kg (ppm)	0.83	0.0061	110	94	10-203	16
Pyrene	mg/kg (ppm)	0.83	0.0065	116	93	10-208	22 vo
Benzyl butyl phthalate	mg/kg (ppm)	0.83	<0.5	96	93	50-150	3
Benz(a)anthracene	mg/kg (ppm)	0.83	<0.005	98	90	37-146	9
Chrysene	mg/kg (ppm)	0.83	0.0037	102	94	36-144	8
Bis(2-ethylhexyl) phthalate	mg/kg (ppm)	0.83	<0.8	89	91	50-150	2
Di-n-octyl phthalate	mg/kg (ppm)	0.83	<0.5	105	101	10-243	4
Benzo(a)pyrene	mg/kg (ppm)	0.83	0.0042	99	88	40-150	12
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	0.0049	103	87	45-157	17
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	<0.0025	90	89	50-150	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	<0.005	91	85	24-145	7
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	<0.005	87	84	31-137	4
Benzo(g,h,i)perylene	mg/kg (ppm)	0.83	<0.03	89	82	14-141	8

Date of Report: 01/30/25
Date Received: 01/15/25
Project: Mercy Housing AS220138B, F&BI 501194

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270E

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Pyridine	mg/kg (ppm)	0.83	92	14-103
Phenol	mg/kg (ppm)	0.83	104	57-113
Bis(2-chloroethyl) ether	mg/kg (ppm)	0.83	96	55-108
2-Chlorophenol	mg/kg (ppm)	0.83	102	60-104
1,3-Dichlorobenzene	mg/kg (ppm)	0.83	99	54-103
1,4-Dichlorobenzene	mg/kg (ppm)	0.83	100	54-102
1,2-Dichlorobenzene	mg/kg (ppm)	0.83	99	55-103
Benzyl alcohol	mg/kg (ppm)	4.2	90	36-147
2,2'-Oxybis(1-chloropropane)	mg/kg (ppm)	0.83	97	56-109
2-Methylphenol	mg/kg (ppm)	0.83	102	62-107
Hexachloroethane	mg/kg (ppm)	0.83	101	54-105
N-Nitroso-di-n-propylamine	mg/kg (ppm)	0.83	102	64-112
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	0.83	103	63-110
Nitrobenzene	mg/kg (ppm)	0.83	99	55-111
Isophorone	mg/kg (ppm)	0.83	107	52-127
2-Nitrophenol	mg/kg (ppm)	0.83	95	53-122
2,4-Dimethylphenol	mg/kg (ppm)	0.83	104	31-105
Benzoic acid	mg/kg (ppm)	2.5	74	38-99
Bis(2-chloroethoxy)methane	mg/kg (ppm)	0.83	104	63-112
2,4-Dichlorophenol	mg/kg (ppm)	0.83	104	62-112
1,2,4-Trichlorobenzene	mg/kg (ppm)	0.83	103	59-105
Naphthalene	mg/kg (ppm)	0.83	94	59-105
Hexachlorobutadiene	mg/kg (ppm)	0.83	91	54-108
4-Chloroaniline	mg/kg (ppm)	6.8	78	36-111
4-Chloro-3-methylphenol	mg/kg (ppm)	0.83	103	63-116
2-Methylnaphthalene	mg/kg (ppm)	0.83	94	62-108
1-Methylnaphthalene	mg/kg (ppm)	0.83	95	62-108
Hexachlorocyclopentadiene	mg/kg (ppm)	0.83	91	48-123
2,4,6-Trichlorophenol	mg/kg (ppm)	0.83	113	61-114
2,4,5-Trichlorophenol	mg/kg (ppm)	0.83	103	64-121
2-Chloronaphthalene	mg/kg (ppm)	0.83	93	62-112
2-Nitroaniline	mg/kg (ppm)	4.2	86	30-179
Dimethyl phthalate	mg/kg (ppm)	0.83	114	63-124
Acenaphthylene	mg/kg (ppm)	0.83	103	61-111
2,6-Dinitrotoluene	mg/kg (ppm)	0.83	119	63-131
3-Nitroaniline	mg/kg (ppm)	4.2	97	57-114
Acenaphthene	mg/kg (ppm)	0.83	99	61-110
2,4-Dinitrophenol	mg/kg (ppm)	1.7	97	51-143
Dibenzofuran	mg/kg (ppm)	0.83	97	65-118
2,4-Dinitrotoluene	mg/kg (ppm)	0.83	115	47-146
4-Nitrophenol	mg/kg (ppm)	1.7	103	63-127
Diethyl phthalate	mg/kg (ppm)	0.83	111	63-124
Fluorene	mg/kg (ppm)	0.83	98	62-114
4-Chlorophenyl phenyl ether	mg/kg (ppm)	0.83	105	61-116
N-Nitrosodiphenylamine	mg/kg (ppm)	0.83	110	64-116
4-Nitroaniline	mg/kg (ppm)	4.2	108	63-117
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	0.83	100	59-152
Hexachlorobenzene	mg/kg (ppm)	0.83	98	57-115
Pentachlorophenol	mg/kg (ppm)	0.83	95	56-130
Phenanthrene	mg/kg (ppm)	0.83	98	64-112
Anthracene	mg/kg (ppm)	0.83	94	63-111
Carbazole	mg/kg (ppm)	0.83	99	68-120
Di-n-butyl phthalate	mg/kg (ppm)	0.83	115	52-130
Fluoranthene	mg/kg (ppm)	0.83	101	66-115
Pyrene	mg/kg (ppm)	0.83	100	65-112
Benzyl butyl phthalate	mg/kg (ppm)	0.83	97	56-131
Benz(a)anthracene	mg/kg (ppm)	0.83	97	64-116
Chrysene	mg/kg (ppm)	0.83	100	66-119
Bis(2-ethylhexyl) phthalate	mg/kg (ppm)	0.83	93	30-165
Di-n-octyl phthalate	mg/kg (ppm)	0.83	101	44-140
Benzo(a)pyrene	mg/kg (ppm)	0.83	95	62-116
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	94	61-118
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	96	65-119
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	92	64-130
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	94	67-131
Benzo(g,h,i)perylene	mg/kg (ppm)	0.83	93	67-126

Date of Report: 01/30/25
Date Received: 01/15/25
Project: Mercy Housing AS220138B, F&BI 501194

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 501194-02 (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	1.60	89	86	75-125	3
Barium	mg/kg (ppm)	50	27.0	114 b	95 b	75-125	18 b
Cadmium	mg/kg (ppm)	10	<1	101	95	75-125	6
Chromium	mg/kg (ppm)	50	10.6	89 b	84 b	75-125	6 b
Lead	mg/kg (ppm)	50	5.35	98	93	75-125	5
Mercury	mg/kg (ppm	5	<1	101	96	75-125	5
Selenium	mg/kg (ppm)	5	<1	87	82	75-125	6
Silver	mg/kg (ppm)	10	<1	96	90	75-125	6

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	87	80-120
Barium	mg/kg (ppm)	50	102	80-120
Cadmium	mg/kg (ppm)	10	98	80-120
Chromium	mg/kg (ppm)	50	105	80-120
Lead	mg/kg (ppm)	50	106	80-120
Mercury	mg/kg (ppm)	5	98	80-120
Selenium	mg/kg (ppm)	5	86	80-120
Silver	mg/kg (ppm)	10	95	80-120

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, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. 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 between the method detection limit and the lowest calibration point. 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.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

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.

501194

SAMPLE CHAIN OF CUSTODY 01/15/25 N2/A3

Report To Ali Cochrane, Hannah Cohen
Company Aspect Consulting
Address 710 2nd Ave, Suite #550
City, State, ZIP Seattle, WA
Phone ____ Email Ali-Cochrane + Hannah-Cohen @aspectconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: Mercy Housing
PO #: AS220138B

REMARKS
Project specific RLs? - Yes / No

INVOICE TO

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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	SVOCs	RCRA Metals	Asbestos		X-per HC 01/22/25 ME Notes
AB-07-1.5	01 A-E	1/13/25	1325	S	5												~~HOLD~~
AB-07-3	02 A-F		1340		6	X	X			X			X	X	X		
AB-07-7	03 A-E		1355		5	X	X			X			X	X			
AB-07-8.5	04 A-F		1415		6										X		
AB-07-12	05 A-E		1450		5	X	X			X			X	X			
AB-07-14	06		1500		5												
AB-07-16	07		1515		5												
AB-07-17.5	08		1525		5	X	X			X			X	X			
AB-07-22	09		1555		5												
AB-07-27.5	10	1/14/25	0840		5	X	X			X			X	X			

ANALYSES REQUESTED

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Favour Epung	Aspect	1/14/25	1805
Received by:	[illegible]	FEDEX	1-15-25	1505
Relinquished by:		Samples received at 4 °C		
Received by:				

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

501194

SAMPLE CHAIN OF CUSTODY

01/15/25 N2/A3

Page # 2 of 2

Report To Ali. Cochrane, Hannah Cohen

Company Aspect Consulting

Address 710 2nd Ave, Suite #550

City, State, ZIP Seattle, WA

Phone _____ Email Ali.cochrane + Hannah.Cohen @aspectconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: Mercy Housing

PO #: AS220138B

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	SVOCs	RCRA metals			Notes
AB-07-33	11 A-E	1/14/25	0910	S	5												~~HOLD~~
AB-07-37	12		0940			X	X			X			X	X			
AB-07-42	13		1050			X	X			X			X	X			
AB-07-49	14		1130														
AB-07-52	15		1305														
AB-07-57.5	16		1420			X	X			X			X	X			
AB-07-63	17		1545			X	X			X			X	X			
AB-102-42	18		1410			X	X			X			X	X			

ANALYSES REQUESTED

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Favour Epung	Aspect	1/14/25	1805
Received by:		HDR	1-15-25	1505
Relinquished by:		Samples received at 4 °C		
Received by:				

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 501193 4 (NP) CLIENT Aspect INITIALS/ DATE: (NP) 1-15-25

If custody seals are present on cooler, are they intact? ☐ NA ☐ YES ☐ NO

Cooler/Sample temperature 4 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☑ YES ☐ NO

How did samples arrive?
☐ Over the Counter ☑ Picked up by F&BI ☐ FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/ AP
*or other representative documents, letters, and/or shipping memos Date: 01/16/25

Number of days samples have been sitting prior to receipt at laboratory 1-2 days

Are the samples clearly identified? (explain "no" answer below) ☐ YES ☑ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☑ YES ☐ NO

Were appropriate sample containers used? ☑ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☑ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☑ NA ☐ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?
(explain "no" answer below)

Sample ID's	☐ Yes	☑ No	Labeled on one 4oz jar AB-07-27 (10A) ☐ Not on COC/label
Date Sampled	☑ Yes	☐ No	☐ Not on COC/label
Time Sampled	☑ Yes	☐ No	☐ Not on COC/label
# of Containers	☑ Yes	☐ No	
Relinquished	☑ Yes	☐ No	
Requested analysis	☑ Yes	☐ On Hold	

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? ☑ NA ☐ YES ☐ NO

Number of unused TO15 canisters _____ **Number of unused TO17 tubes** _____

January 29, 2025

Michael Erdahl
Friedman & Bruya
5500 4th Ave S.
Seattle, WA 98108-2419

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 2501261.00

Client Project: 501194
Location: N-A

Dear Mr. Erdahl,

Enclosed please find test results for the 2 sample(s) submitted to our laboratory for analysis on 1/22/2025.

Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with **U. S. EPA 40 CFR Appendix E to Subpart E of Part 763**, Interim Method for the Determination of Asbestos in Bulk Insulation Samples and **EPA 600/R-93/116**, Method for the Determination of Asbestos in Bulk Building Materials.

For samples containing more than one separable layer of materials, the report will include findings for each layer (labeled Layer 1 and Layer 2, etc. for each individual layer). The asbestos concentration in the sample is determined by calibrated visual estimation.

For those samples with asbestos concentrations between 1 and 10 percent based on visual estimation, the EPA recommends a procedure known as point counting (NESHAPS, 40 CFR Part 61). Point counting is a statistically more accurate means of quantification for samples with low concentrations of asbestos.

The detection limit for the calibrated visual estimation is <1%, 400 point counts is 0.25% and 1000 point counts is 0.1%

Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. Please do not hesitate to call if there is anything further we can assist you with.

Sincerely,

Hilary Crumley, Manager Asbestos Laboratory

NVLAP Testing
Lab Code: 102063-0

Enc.: Sample Results

Phone: 206 547.0100 | Fax: 206 634.1936 | Toll Free: 1.888.NVL.LABS (685.5227)
4708 Aurora Avenue North | Seattle, WA 98103-6516

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Friedman & Bruya
Address: 5500 4th Ave S.
Seattle, WA 98108-2419

Attention: Mr. Michael Erdahl
Project Location: N-A

Batch #: 2501261.00
Client Project #: 501194
Date Received: 1/22/2025
Samples Received: 2
Samples Analyzed: 2
Method: EPA/600/R-93/116

Lab ID: 250007892 **Client Sample #: AB-07-3**

Location: N-A

Comments: Qualitative analysis was conducted for the presence of asbestos fibers in this sample.

Layer 1 of 1 **Description:** Loose brown gravelly material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Gravel, Fine grains, Mineral grains	Cellulose	**None Detected ND**

Lab ID: 250007893 **Client Sample #: AB-07-8.5**

Location: N-A

Comments: Qualitative analysis was conducted for the presence of asbestos fibers in this sample.

Layer 1 of 1 **Description:** Loose brown gravelly material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Gravel, Fine grains, Mineral grains	Cellulose	**None Detected ND**

Sampled by: Client
Analyzed by: Michelle Seidl **Date:** 01/28/2025
Reviewed by: Hilary Crumley **Date:** 01/29/2025

Hilary Crumley, Manager Asbestos Laboratory

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and EPA 40 CFR Appendix E to Subpart E of Part 763 with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

ASBESTOS LABORATORY SERVICES

Company	Friedman & Bruya	**NVL Batch Number**	**2501261.00**
Address	5500 4th Ave S. Seattle, WA 98108-2419	**TAT**	5 Days **AH** No
		Rush TAT	
Project Manager	Mr. Michael Erdahl	**Due Date**	1/29/2025 **Time** 2:00 PM
Phone	(206) 285-8282	**Email**	merdahl@friedmanandbruya.com
		Fax	(206) 283-5044

Project Name/Number: 501194 **Project Location:** N-A

Subcategory PLM Bulk

Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 2 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	250007892	AB-07-3		A
2	250007893	AB-07-8.5		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Client				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Kelly AuVu		NVL	1/22/25	1400
Analyzed by	Michelle Seidl		NVL	1/28/25	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 1/22/2025
Time: 4:18 PM
Entered By: Kelly AuVu

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 5500 4th Ave S

City, State, ZIP Seattle, WA 98108

Phone # (206) 285-8282 merdahl@friedmanandbruya.com

SUBCONTRACTER
NVL

PROJECT NAME/NO.
501194

PO #
F-37

REMARKS

TURNAROUND TIME
☒ Standard TAT
☐ RUSH
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: Asbestos										Notes
AB-07-3		1/13/2025	1340	soil	1	x										
AB-07-8.5		1/13/2025	1415	soil	1	x										

2501261

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	1/22/25	1346
Received by:	Kenny AuVu	NW	1/22/25	1400
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

January 30, 2025

Ali Cochrane, Project Manager
Aspect Consulting
710 2nd Ave S, Suite 550
Seattle, WA 98104

Dear Ms Cochrane:

Included are the results from the testing of material submitted on January 17, 2025 from the Mercy Housing AS220138B, F&BI 501231 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: Aspect Data, Hannah Cohen
ASP0130R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 17, 2025 by Friedman & Bruya, Inc. from the Aspect Consulting Mercy Housing AS220138B, F&BI 501231 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Aspect Consulting
501231 -01	AB-07-67
501231 -02	AB-07-72.5
501231 -03	AB-07-77
501231 -04	AB-07-84
501231 -05	AB-07-87.5
501231 -06	AB-07-94
501231 -07	AB-07-96.5
501231 -08	AB-07-102
501231 -09	AB-07-107.5
501231 -10	AMW-04-1.5
501231 -11	AMW-04-4
501231 -12	AMW-04-7
501231 -13	AMW-04-8.5
501231 -14	AMW-04-11
501231 -15	AMW-04-14
501231 -16	AMW-04-17
501231 -17	AMW-04-19
501231 -18	AMW-04-22.5
501231 -19	AMW-04-27

All quality control requirements were acceptable.

Date of Report: 01/30/25
Date Received: 01/17/25
Project: Mercy Housing AS220138B, F&BI 501231
Date Extracted: 01/23/25
Date Analyzed: 01/24/25

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)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
AB-07-72.5 501231-02	<5	94
AB-07-84 501231-04	<5	83
AB-07-107.5 501231-09	<5	98
AMW-04-1.5 501231-10	<5	93
AMW-04-7 501231-12	<5	89
Method Blank 05-058 MB	<5	93

Date of Report: 01/30/25
Date Received: 01/17/25
Project: Mercy Housing AS220138B, F&BI 501231
Date Extracted: 01/23/25
Date Analyzed: 01/23/25

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)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
AB-07-72.5 501231-02	<50	<250	84
AB-07-84 501231-04	<50	<250	86
AB-07-107.5 501231-09	<50	<250	87
AMW-04-1.5 501231-10	<50	<250	89
AMW-04-7 501231-12	<50	<250	84
Method Blank 05-228 MB	<50	<250	79

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-07-72.5	Client:	Aspect Consulting
Date Received:	01/17/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/27/25	Lab ID:	501231-02 1/0.5
Date Analyzed:	01/28/25	Data File:	012809.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	93	84	120
Toluene-d8	99	73	128
4-Bromofluorobenzene	103	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-07-84	Client:	Aspect Consulting
Date Received:	01/17/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/27/25	Lab ID:	501231-04 1/0.5
Date Analyzed:	01/28/25	Data File:	012811.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	84	120
Toluene-d8	101	73	128
4-Bromofluorobenzene	104	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-07-107.5	Client:	Aspect Consulting
Date Received:	01/17/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/27/25	Lab ID:	501231-09 1/0.5
Date Analyzed:	01/28/25	Data File:	012812.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	84	120
Toluene-d8	98	73	128
4-Bromofluorobenzene	105	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AMW-04-1.5	Client:	Aspect Consulting
Date Received:	01/17/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/27/25	Lab ID:	501231-10 1/0.5
Date Analyzed:	01/28/25	Data File:	012813.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	84	120
Toluene-d8	100	73	128
4-Bromofluorobenzene	104	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.019	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AMW-04-7	Client:	Aspect Consulting
Date Received:	01/17/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/27/25	Lab ID:	501231-12 1/0.5
Date Analyzed:	01/28/25	Data File:	012814.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	84	120
Toluene-d8	98	73	128
4-Bromofluorobenzene	107	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	Method Blank	Client:	Aspect Consulting
Date Received:	Not Applicable	Project:	Mercy Housing AS220138B
Date Extracted:	01/27/25	Lab ID:	05-0183 mb 1/0.5
Date Analyzed:	01/27/25	Data File:	012718.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	84	120
Toluene-d8	99	73	128
4-Bromofluorobenzene	101	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-07-72.5	Client:	Aspect Consulting
Date Received:	01/17/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501231-02 1/5
Date Analyzed:	01/23/25	Data File:	012320.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	75	14	115
Phenol-d6	88	29	121
Nitrobenzene-d5	88	16	137
2-Fluorobiphenyl	94	46	122
2,4,6-Tribromophenol	95	17	154
Terphenyl-d14	86	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25 ca	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-07-84	Client:	Aspect Consulting
Date Received:	01/17/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501231-04 1/5
Date Analyzed:	01/23/25	Data File:	012321.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	79	14	115
Phenol-d6	91	29	121
Nitrobenzene-d5	91	16	137
2-Fluorobiphenyl	96	46	122
2,4,6-Tribromophenol	94	17	154
Terphenyl-d14	86	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25 ca	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AB-07-107.5	Client:	Aspect Consulting
Date Received:	01/17/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501231-09 1/5
Date Analyzed:	01/24/25	Data File:	012322.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	72	14	115
Phenol-d6	84	29	121
Nitrobenzene-d5	84	16	137
2-Fluorobiphenyl	90	46	122
2,4,6-Tribromophenol	86	17	154
Terphenyl-d14	81	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25 ca	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AMW-04-1.5	Client:	Aspect Consulting
Date Received:	01/17/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501231-10 1/5
Date Analyzed:	01/24/25	Data File:	012323.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	76	14	115
Phenol-d6	88	29	121
Nitrobenzene-d5	88	16	137
2-Fluorobiphenyl	92	46	122
2,4,6-Tribromophenol	93	17	154
Terphenyl-d14	86	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25 ca	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AMW-04-7	Client:	Aspect Consulting
Date Received:	01/17/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501231-12 1/5
Date Analyzed:	01/24/25	Data File:	012324.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	79	14	115
Phenol-d6	90	29	121
Nitrobenzene-d5	92	16	137
2-Fluorobiphenyl	94	46	122
2,4,6-Tribromophenol	89	17	154
Terphenyl-d14	84	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25 ca	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	Aspect Consulting
Date Received:	Not Applicable	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	05-0226 mb 1/5
Date Analyzed:	01/23/25	Data File:	012309.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	88	14	115
Phenol-d6	100	29	121
Nitrobenzene-d5	103	16	137
2-Fluorobiphenyl	107	46	122
2,4,6-Tribromophenol	95	17	154
Terphenyl-d14	97	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25 ca	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-07-72.5	Client:	Aspect Consulting
Date Received:	01/17/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501231-02
Date Analyzed:	01/23/25	Data File:	501231-02.058
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.9
Barium	32
Cadmium	<1
Chromium	17
Lead	2.0
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-07-84	Client:	Aspect Consulting
Date Received:	01/17/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501231-04
Date Analyzed:	01/23/25	Data File:	501231-04.059
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.5
Barium	45
Cadmium	<1
Chromium	14
Lead	2.2
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-07-107.5	Client:	Aspect Consulting
Date Received:	01/17/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501231-09
Date Analyzed:	01/23/25	Data File:	501231-09.060
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.0
Barium	34
Cadmium	<1
Chromium	15
Lead	3.0
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-04-1.5	Client:	Aspect Consulting
Date Received:	01/17/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501231-10
Date Analyzed:	01/23/25	Data File:	501231-10.061
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.5
Barium	60
Cadmium	<1
Chromium	18
Lead	4.5
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-04-7	Client:	Aspect Consulting
Date Received:	01/17/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	501231-12
Date Analyzed:	01/23/25	Data File:	501231-12.062
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.0
Barium	37
Cadmium	<1
Chromium	16
Lead	3.3
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Aspect Consulting
Date Received:	NA	Project:	Mercy Housing AS220138B
Date Extracted:	01/23/25	Lab ID:	I5-60 mb2
Date Analyzed:	01/23/25	Data File:	I5-60 mb2.057
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Date of Report: 01/30/25
Date Received: 01/17/25
Project: Mercy Housing AS220138B, F&BI 501231

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TPH AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code: 501225-01 (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)	40	82	70-130

Date of Report: 01/30/25
Date Received: 01/17/25
Project: Mercy Housing AS220138B, F&BI 501231

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 501231-02 (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	<50	110	108	63-146	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	100	77-123

Date of Report: 01/30/25
Date Received: 01/17/25
Project: Mercy Housing AS220138B, F&BI 501231

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2	74	69	10-93	7
Chloromethane	mg/kg (ppm)	2	89	82	34-101	8
Vinyl chloride	mg/kg (ppm)	2	98	92	47-106	6
Bromomethane	mg/kg (ppm)	2	80	83	38-123	4
Chloroethane	mg/kg (ppm)	2	91	86	44-123	6
Trichlorofluoromethane	mg/kg (ppm)	2	97	94	56-108	3
Acetone	mg/kg (ppm)	10	102	95	24-185	7
1,1-Dichloroethene	mg/kg (ppm)	2	95	90	61-118	5
Hexane	mg/kg (ppm)	2	103	99	54-142	4
Methylene chloride	mg/kg (ppm)	2	101	97	10-213	4
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	101	97	70-130	4
trans-1,2-Dichloroethene	mg/kg (ppm)	2	98	94	70-130	4
1,1-Dichloroethane	mg/kg (ppm)	2	98	92	70-130	6
2,2-Dichloropropane	mg/kg (ppm)	2	106	96	45-172	10
cis-1,2-Dichloroethene	mg/kg (ppm)	2	101	96	70-130	5
Chloroform	mg/kg (ppm)	2	96	93	70-130	3
2-Butanone (MEK)	mg/kg (ppm)	10	112	108	36-182	4
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	100	97	66-140	3
1,1,1-Trichloroethane	mg/kg (ppm)	2	99	96	70-130	3
1,1-Dichloropropene	mg/kg (ppm)	2	98	96	70-130	2
Carbon tetrachloride	mg/kg (ppm)	2	105	101	68-146	4
Benzene	mg/kg (ppm)	2	102	98	70-130	4
Trichloroethene	mg/kg (ppm)	2	99	96	53-133	3
1,2-Dichloropropane	mg/kg (ppm)	2	96	93	67-137	3
Bromodichloromethane	mg/kg (ppm)	2	101	97	70-130	4
Dibromomethane	mg/kg (ppm)	2	101	95	70-130	6
4-Methyl-2-pentanone	mg/kg (ppm)	10	102	101	70-130	1
cis-1,3-Dichloropropene	mg/kg (ppm)	2	97	94	70-130	3
Toluene	mg/kg (ppm)	2	99	96	63-127	3
trans-1,3-Dichloropropene	mg/kg (ppm)	2	97	94	70-130	3
1,1,2-Trichloroethane	mg/kg (ppm)	2	100	97	70-130	3
2-Hexanone	mg/kg (ppm)	10	107	106	65-148	1
1,3-Dichloropropane	mg/kg (ppm)	2	96	94	67-135	2
Tetrachloroethene	mg/kg (ppm)	2	98	95	59-138	3
Dibromochloromethane	mg/kg (ppm)	2	97	91	61-154	6
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	96	94	70-130	2
Chlorobenzene	mg/kg (ppm)	2	98	95	65-133	3
Ethylbenzene	mg/kg (ppm)	2	101	99	60-140	2
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	97	95	68-129	2
m,p-Xylene	mg/kg (ppm)	4	100	98	56-145	2
o-Xylene	mg/kg (ppm)	2	100	97	61-137	3
Styrene	mg/kg (ppm)	2	102	98	61-138	4
Isopropylbenzene	mg/kg (ppm)	2	100	97	52-148	3
Bromoform	mg/kg (ppm)	2	91	91	57-166	0
n-Propylbenzene	mg/kg (ppm)	2	94	99	36-162	5
Bromobenzene	mg/kg (ppm)	2	92	96	63-127	4
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	94	95	43-156	1
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	98	102	35-184	4
1,2,3-Trichloropropane	mg/kg (ppm)	2	92	95	70-130	3
2-Chlorotoluene	mg/kg (ppm)	2	95	95	50-146	0
4-Chlorotoluene	mg/kg (ppm)	2	93	96	47-150	3
tert-Butylbenzene	mg/kg (ppm)	2	95	96	41-154	1
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	96	97	42-159	1
sec-Butylbenzene	mg/kg (ppm)	2	96	97	25-175	1
p-Isopropyltoluene	mg/kg (ppm)	2	96	99	18-186	3
1,3-Dichlorobenzene	mg/kg (ppm)	2	95	97	49-149	2
1,4-Dichlorobenzene	mg/kg (ppm)	2	95	96	48-149	1
1,2-Dichlorobenzene	mg/kg (ppm)	2	94	96	58-139	2
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	90	91	70-130	1
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	97	97	39-166	0
Hexachlorobutadiene	mg/kg (ppm)	2	93	94	41-186	1
Naphthalene	mg/kg (ppm)	2	97	97	67-143	0
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	96	94	49-165	2

Date of Report: 01/30/25
Date Received: 01/17/25
Project: Mercy Housing AS220138B, F&BI 501231

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270E

Laboratory Code: 501194-02 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Pyridine	mg/kg (ppm)	0.83	<0.5	72	64	10-99	12
Phenol	mg/kg (ppm)	0.83	<0.25	98	97	50-150	1
Bis(2-chloroethyl) ether	mg/kg (ppm)	0.83	<0.05	91	91	50-150	0
2-Chlorophenol	mg/kg (ppm)	0.83	<0.5	95	94	50-150	1
1,3-Dichlorobenzene	mg/kg (ppm)	0.83	<0.05	83	82	36-107	1
1,4-Dichlorobenzene	mg/kg (ppm)	0.83	<0.05	84	82	37-106	2
1,2-Dichlorobenzene	mg/kg (ppm)	0.83	<0.05	86	85	39-106	1
Benzyl alcohol	mg/kg (ppm)	4.2	<0.5	86	84	50-150	2
2,2'-Oxybis(1-chloropropane)	mg/kg (ppm)	0.83	<0.05	89	90	50-150	1
2-Methylphenol	mg/kg (ppm)	0.83	<0.5	97	96	50-150	1
Hexachloroethane	mg/kg (ppm)	0.83	<0.05	88	86	19-129	2
N-Nitroso-di-n-propylamine	mg/kg (ppm)	0.83	<0.05	97	97	50-150	0
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	0.83	<1	97	96	50-150	1
Nitrobenzene	mg/kg (ppm)	0.83	<0.05	94	92	50-150	2
Isophorone	mg/kg (ppm)	0.83	<0.05	103	100	16-156	3
2-Nitrophenol	mg/kg (ppm)	0.83	<0.5	92	90	50-150	2
2,4-Dimethylphenol	mg/kg (ppm)	0.83	<0.5	98	96	35-117	2
Benzoic acid	mg/kg (ppm)	2.5	<2.5	65	64	10-105	2
Bis(2-chloroethoxy)methane	mg/kg (ppm)	0.83	<0.05	100	98	50-150	2
2,4-Dichlorophenol	mg/kg (ppm)	0.83	<0.5	99	97	50-150	2
1,2,4-Trichlorobenzene	mg/kg (ppm)	0.83	<0.05	94	92	50-150	2
Naphthalene	mg/kg (ppm)	0.83	<0.005	87	85	50-150	2
Hexachlorobutadiene	mg/kg (ppm)	0.83	<0.05	82	79	39-106	4
4-Chloroaniline	mg/kg (ppm)	6.8	<5	77	77	40-101	0
4-Chloro-3-methylphenol	mg/kg (ppm)	0.83	<0.5	100	97	50-150	3
2-Methylnaphthalene	mg/kg (ppm)	0.83	<0.0025	88	85	50-150	3
1-Methylnaphthalene	mg/kg (ppm)	0.83	<0.0025	89	86	50-150	3
Hexachlorocyclopentadiene	mg/kg (ppm)	0.83	<0.15	78	89	27-127	13
2,4,6-Trichlorophenol	mg/kg (ppm)	0.83	<0.5	105	101	35-130	4
2,4,5-Trichlorophenol	mg/kg (ppm)	0.83	<0.5	98	99	43-126	1
2-Chloronaphthalene	mg/kg (ppm)	0.83	<0.05	86	85	50-150	1
2-Nitroaniline	mg/kg (ppm)	4.2	<0.25	82	81	50-150	1
Dimethyl phthalate	mg/kg (ppm)	0.83	<0.5	101	99	50-150	2
Acenaphthylene	mg/kg (ppm)	0.83	<0.0025	98	97	50-150	1
2,6-Dinitrotoluene	mg/kg (ppm)	0.83	<0.25	112	112	50-150	0
3-Nitroaniline	mg/kg (ppm)	4.2	<5	87	82	50-150	6
Acenaphthene	mg/kg (ppm)	0.83	<0.0025	92	92	50-150	0
2,4-Dinitrophenol	mg/kg (ppm)	1.7	<1.5	91	83	10-146	9
Dibenzofuran	mg/kg (ppm)	0.83	<0.0025	92	90	50-150	2
2,4-Dinitrotoluene	mg/kg (ppm)	0.83	<0.25	105	104	44-141	1
4-Nitrophenol	mg/kg (ppm)	1.7	<1.5	90	87	33-142	3
Diethyl phthalate	mg/kg (ppm)	0.83	<0.5	101	99	50-150	2
Fluorene	mg/kg (ppm)	0.83	<0.0025	92	89	50-150	3
4-Chlorophenyl phenyl ether	mg/kg (ppm)	0.83	<0.05	96	95	50-150	1
N-Nitrosodiphenylamine	mg/kg (ppm)	0.83	<0.05	104	103	50-150	1
4-Nitroaniline	mg/kg (ppm)	4.2	<5	100	98	50-150	2
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	0.83	<1.5	94	91	33-155	3
Hexachlorobenzene	mg/kg (ppm)	0.83	<0.05	92	93	50-150	1
Pentachlorophenol	mg/kg (ppm)	0.83	<0.25	89	88	15-159	1
Phenanthrene	mg/kg (ppm)	0.83	0.0038	101	92	10-170	9
Anthracene	mg/kg (ppm)	0.83	<0.0025	90	89	37-139	1
Carbazole	mg/kg (ppm)	0.83	<0.0025	94	93	50-150	1
Di-n-butyl phthalate	mg/kg (ppm)	0.83	<0.5	107	109	50-150	2
Fluoranthene	mg/kg (ppm)	0.83	0.0061	110	94	10-203	16
Pyrene	mg/kg (ppm)	0.83	0.0065	116	93	10-208	22 vo
Benzyl butyl phthalate	mg/kg (ppm)	0.83	<0.5	96	93	50-150	3
Benz(a)anthracene	mg/kg (ppm)	0.83	<0.005	98	90	37-146	9
Chrysene	mg/kg (ppm)	0.83	0.0037	102	94	36-144	8
Bis(2-ethylhexyl) phthalate	mg/kg (ppm)	0.83	<0.8	89	91	50-150	2
Di-n-octyl phthalate	mg/kg (ppm)	0.83	<0.5	105	101	10-243	4
Benzo(a)pyrene	mg/kg (ppm)	0.83	0.0042	99	88	40-150	12
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	0.0049	103	87	45-157	17
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	<0.0025	90	89	50-150	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	<0.005	91	85	24-145	7
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	<0.005	87	84	31-137	4
Benzo(g,h,i)perylene	mg/kg (ppm)	0.83	<0.03	89	82	14-141	8

Date of Report: 01/30/25
Date Received: 01/17/25
Project: Mercy Housing AS220138B, F&BI 501231

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270E

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Pyridine	mg/kg (ppm)	0.83	92	14-103
Phenol	mg/kg (ppm)	0.83	104	57-113
Bis(2-chloroethyl) ether	mg/kg (ppm)	0.83	96	55-108
2-Chlorophenol	mg/kg (ppm)	0.83	102	60-104
1,3-Dichlorobenzene	mg/kg (ppm)	0.83	99	54-103
1,4-Dichlorobenzene	mg/kg (ppm)	0.83	100	54-102
1,2-Dichlorobenzene	mg/kg (ppm)	0.83	99	55-103
Benzyl alcohol	mg/kg (ppm)	4.2	90	36-147
2,2'-Oxybis(1-chloropropane)	mg/kg (ppm)	0.83	97	56-109
2-Methylphenol	mg/kg (ppm)	0.83	102	62-107
Hexachloroethane	mg/kg (ppm)	0.83	101	54-105
N-Nitroso-di-n-propylamine	mg/kg (ppm)	0.83	102	64-112
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	0.83	103	63-110
Nitrobenzene	mg/kg (ppm)	0.83	99	55-111
Isophorone	mg/kg (ppm)	0.83	107	52-127
2-Nitrophenol	mg/kg (ppm)	0.83	95	53-122
2,4-Dimethylphenol	mg/kg (ppm)	0.83	104	31-105
Benzoic acid	mg/kg (ppm)	2.5	74	38-99
Bis(2-chloroethoxy)methane	mg/kg (ppm)	0.83	104	63-112
2,4-Dichlorophenol	mg/kg (ppm)	0.83	104	62-112
1,2,4-Trichlorobenzene	mg/kg (ppm)	0.83	103	59-105
Naphthalene	mg/kg (ppm)	0.83	94	59-105
Hexachlorobutadiene	mg/kg (ppm)	0.83	91	54-108
4-Chloroaniline	mg/kg (ppm)	6.8	78	36-111
4-Chloro-3-methylphenol	mg/kg (ppm)	0.83	103	63-116
2-Methylnaphthalene	mg/kg (ppm)	0.83	94	62-108
1-Methylnaphthalene	mg/kg (ppm)	0.83	95	62-108
Hexachlorocyclopentadiene	mg/kg (ppm)	0.83	91	48-123
2,4,6-Trichlorophenol	mg/kg (ppm)	0.83	113	61-114
2,4,5-Trichlorophenol	mg/kg (ppm)	0.83	103	64-121
2-Chloronaphthalene	mg/kg (ppm)	0.83	93	62-112
2-Nitroaniline	mg/kg (ppm)	4.2	86	30-179
Dimethyl phthalate	mg/kg (ppm)	0.83	114	63-124
Acenaphthylene	mg/kg (ppm)	0.83	103	61-111
2,6-Dinitrotoluene	mg/kg (ppm)	0.83	119	63-131
3-Nitroaniline	mg/kg (ppm)	4.2	97	57-114
Acenaphthene	mg/kg (ppm)	0.83	99	61-110
2,4-Dinitrophenol	mg/kg (ppm)	1.7	97	51-143
Dibenzofuran	mg/kg (ppm)	0.83	97	65-118
2,4-Dinitrotoluene	mg/kg (ppm)	0.83	115	47-146
4-Nitrophenol	mg/kg (ppm)	1.7	103	63-127
Diethyl phthalate	mg/kg (ppm)	0.83	111	63-124
Fluorene	mg/kg (ppm)	0.83	98	62-114
4-Chlorophenyl phenyl ether	mg/kg (ppm)	0.83	105	61-116
N-Nitrosodiphenylamine	mg/kg (ppm)	0.83	110	64-116
4-Nitroaniline	mg/kg (ppm)	4.2	108	63-117
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	0.83	100	59-152
Hexachlorobenzene	mg/kg (ppm)	0.83	98	57-115
Pentachlorophenol	mg/kg (ppm)	0.83	95	56-130
Phenanthrene	mg/kg (ppm)	0.83	98	64-112
Anthracene	mg/kg (ppm)	0.83	94	63-111
Carbazole	mg/kg (ppm)	0.83	99	68-120
Di-n-butyl phthalate	mg/kg (ppm)	0.83	115	52-130
Fluoranthene	mg/kg (ppm)	0.83	101	66-115
Pyrene	mg/kg (ppm)	0.83	100	65-112
Benzyl butyl phthalate	mg/kg (ppm)	0.83	97	56-131
Benz(a)anthracene	mg/kg (ppm)	0.83	97	64-116
Chrysene	mg/kg (ppm)	0.83	100	66-119
Bis(2-ethylhexyl) phthalate	mg/kg (ppm)	0.83	93	30-165
Di-n-octyl phthalate	mg/kg (ppm)	0.83	101	44-140
Benzo(a)pyrene	mg/kg (ppm)	0.83	95	62-116
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	94	61-118
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	96	65-119
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	92	64-130
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	94	67-131
Benzo(g,h,i)perylene	mg/kg (ppm)	0.83	93	67-126

Date of Report: 01/30/25
Date Received: 01/17/25
Project: Mercy Housing AS220138B, F&BI 501231

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 501257-05 (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	2.33	95 b	90 b	75-125	5 b
Barium	mg/kg (ppm)	50	50.2	105 b	103 b	75-125	2 b
Cadmium	mg/kg (ppm)	10	<1	95	89	75-125	7
Chromium	mg/kg (ppm)	50	13.9	37 b	48 b	75-125	26 b
Lead	mg/kg (ppm)	50	3.49	107	100	75-125	7
Mercury	mg/kg (ppm	5	<1	87	86	75-125	1
Selenium	mg/kg (ppm)	5	<1	84	75	75-125	11
Silver	mg/kg (ppm)	10	<1	85	80	75-125	6

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	96	80-120
Barium	mg/kg (ppm)	50	98	80-120
Cadmium	mg/kg (ppm)	10	99	80-120
Chromium	mg/kg (ppm)	50	104	80-120
Lead	mg/kg (ppm)	50	117	80-120
Mercury	mg/kg (ppm)	5	89	80-120
Selenium	mg/kg (ppm)	5	95	80-120
Silver	mg/kg (ppm)	10	93	80-120

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, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. 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 between the method detection limit and the lowest calibration point. 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.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

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.

50 1231

SAMPLE CHAIN OF CUSTODY

01/17/25 N3/A3

AP

Page # 1 of 2 01/20

Report To Ali Cochrane, Hannah Cohen

Company Aspect Consulting

Address 710 2nd Ave, Suite 1550

City, State, ZIP Seattle, WA

Phone ____ Email Ali.Cochrane + Hannah Cohen @aspectconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: Mercy Housing

PO #: AS220138B

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

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: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	SVOCs	RCRA Metals			X-per HC 01/22/25 ME Notes
AB-07-67	01 A-E	1/15/25	0850	S	5												~~HOLD~~
AB-07-72.5	02		1005			X	X			X			X	X			
AB-07-77	03		1145														
AB-07-84	04		1430			X	X			X			X	X			
AB-07 87.5	05		1520														
AB-07-94	06	1/16/25	0855														
AB-07-96.5	07		0955														
AB-07-102	08		1105														
AB-07-107.5	09		1155			X	X			X			X	X			
AMW-04-1.5	10	1/17/25	1030			X	X			X			X	X			

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Favour Epuna	Aspect	1/17/25	1641
Received by:	VINH	FB1	1-17-25	1641
Relinquished by:		Samples received at 4 °C		
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

501231

SAMPLE CHAIN OF CUSTODY

01/17/25 N3/A3

Page # 2 of 2

Report To Ali Cochrane + Hannah Cohen

Company Aspect Consulting

Address 710 2nd Ave, Suite #550

City, State, ZIP Seattle, WA

Phone _____ Email Ali.Cochrane + Hannah Cohen @aspectconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: Mercy Housing

PO #: AS220138B

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	SVOCs	RCRA metals			Notes
						ANALYSES REQUESTED											
AMW-04-4	11 A-F	1/17/25	1040	S	6												~~HOLD~~
AMW-04-7	12 A-E		1100		5	X	X			X			X	X			
AMW-04-8.5	13 A-F		1110		6												
AMW-04-11	14 A-E		1135		5												
AMW-04-14	15		1145														
AMW-04-17	16		1200														
AMW-04-19	17		1210														
AMW-04-22.5	18		1240														
AMW-04-27	19		1255														

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Favour Epuna	Aspect	1/17/25	1641
Received by:	~~FB~~ ~~FB1~~ VINH	FB1	1-17-25	1641
Relinquished by:		Samples received at 4 °C		
Received by:				

Friedman & Bruya, Inc.
Ph. (206) 285-8282

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 501231 AP CLIENT Aspect INITIALS: RR DATE: 1-17-25

If custody seals are present on cooler, are they intact? ☒ NA ☐ YES ☐ NO

Cooler/Sample temperature 4 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☒ YES ☐ NO

How did samples arrive?
☐ Over the Counter ☒ Picked up by F&BI ☐ FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? ☒ YES ☐ NO Initials/Date: AP 01/20/25
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 0-2 days

Are the samples clearly identified? (explain "no" answer below) ☒ YES ☐ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☒ YES ☐ NO

Were appropriate sample containers used? ☒ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☒ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☒ NA ☐ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?
(explain "no" answer below)

Sample ID's	☒ Yes ☐ No	☐ Not on COC/label
Date Sampled	☒ Yes ☐ No	☐ Not on COC/label
Time Sampled	☒ Yes ☐ No	☐ Not on COC/label
# of Containers	☒ Yes ☐ No	
Relinquished	☒ Yes ☐ No	
Requested analysis	☒ Yes ☐ On Hold	

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? ☒ NA ☐ YES ☐ NO

Number of unused TO15 canisters _____ **Number of unused TO17 tubes** _____

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

February 6, 2025

Ali Cochrane, Project Manager
Aspect Consulting
710 2nd Ave S, Suite 550
Seattle, WA 98104

Dear Ms Cochrane:

Included is the amended report from the testing of material submitted on January 21, 2025 from the Mercy Housing AS220138B, F&BI 501267 project. Sample ID AMW-103-59 has been corrected to AMW-103-89.

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: Aspect Data, Hannah Cohen
ASP0205R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

February 5, 2025

Ali Cochrane, Project Manager
Aspect Consulting
710 2nd Ave S, Suite 550
Seattle, WA 98104

Dear Ms Cochrane:

Included are the results from the testing of material submitted on January 21, 2025 from the Mercy Housing AS220138B, F&BI 501267 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: Aspect Data, Hannah Cohen
ASP0205R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 21, 2025 by Friedman & Bruya, Inc. from the Aspect Consulting Mercy Housing AS220138B, F&BI 501267 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Aspect Consulting
501267 -01	AMW-04-31.5
501267 -02	AMW-04-37
501267 -03	AMW-04-43
501267 -04	AMW-04-49
501267 -05	AMW-04-53
501267 -06	AMW-04-56.5
501267 -07	AMW-04-62
501267 -08	AMW-04-68
501267 -09	AMW-04-70
501267 -10	AMW-04-78
501267 -11	AMW-04-82
501267 -12	AMW-04-89
501267 -13	AMW-04-92
501267 -14	AMW-103-89

The 8260D calibration standard exceeded the acceptance criteria for several compounds. The compounds were not detected, therefore this did not represent an out of control condition, and were qualified with a "k" qualifier. The results are not considered estimates.

The 8260D matrix spike and matrix spike duplicate exceeded the relative percent difference acceptance criteria for several compounds. The analytes were not detected therefore the data were acceptable.

All other quality control requirements were acceptable.

Date of Report: 02/05/25
Date Received: 01/21/25
Project: Mercy Housing AS220138B, F&BI 501267
Date Extracted: 01/31/25
Date Analyzed: 01/31/25

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)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
AMW-04-37 501267-02	<5	91
AMW-04-49 501267-04	<5	91
AMW-04-56.5 501267-06	<5	88
AMW-04-70 501267-09	<5	89
AMW-04-89 501267-12	<5	86
AMW-04-92 501267-13	<5	94
AMW-103-89 501267-14	<5	90
Method Blank 05-068 MB	<5	91

Date of Report: 02/05/25
Date Received: 01/21/25
Project: Mercy Housing AS220138B, F&BI 501267
Date Extracted: 01/31/25
Date Analyzed: 01/31/25

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)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
AMW-04-37 501267-02	<50	<250	103
AMW-04-49 501267-04	<50	<250	104
AMW-04-56.5 501267-06	<50	<250	105
AMW-04-70 501267-09	<50	<250	104
AMW-04-89 501267-12	<50	<250	107
AMW-04-92 501267-13	<50	<250	105
AMW-103-89 501267-14	<50	<250	103
Method Blank 05-312 MB2	<50	<250	106

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AMW-04-37	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/31/25	Lab ID:	501267-02 1/0.5
Date Analyzed:	01/31/25	Data File:	013112.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	79	128
Toluene-d8	99	84	121
4-Bromofluorobenzene	117 vo	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 k	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 k	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1 k		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AMW-04-49	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/31/25	Lab ID:	501267-04 1/0.5
Date Analyzed:	01/31/25	Data File:	013113.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	79	128
Toluene-d8	98	84	121
4-Bromofluorobenzene	108	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 k	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 k	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1 k		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AMW-04-56.5	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/31/25	Lab ID:	501267-06 1/0.5
Date Analyzed:	01/31/25	Data File:	013114.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	79	128
Toluene-d8	95	84	121
4-Bromofluorobenzene	106	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 k	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 k	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1 k		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AMW-04-70	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/31/25	Lab ID:	501267-09 1/0.5
Date Analyzed:	01/31/25	Data File:	013115.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	111	79	128
Toluene-d8	96	84	121
4-Bromofluorobenzene	106	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 k	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 k	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1 k		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AMW-04-89	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/31/25	Lab ID:	501267-12 1/0.5
Date Analyzed:	01/31/25	Data File:	013116.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	79	128
Toluene-d8	98	84	121
4-Bromofluorobenzene	108	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 k	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 k	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1 k		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AMW-04-92	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/31/25	Lab ID:	501267-13 1/0.5
Date Analyzed:	01/31/25	Data File:	013117.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	79	128
Toluene-d8	99	84	121
4-Bromofluorobenzene	110	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 k	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 k	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1 k		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AMW-103-89	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/31/25	Lab ID:	501267-14 1/0.5
Date Analyzed:	01/31/25	Data File:	013118.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	90	79	128
Toluene-d8	93	84	121
4-Bromofluorobenzene	109	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 k	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 k	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1 k		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	Method Blank	Client:	Aspect Consulting
Date Received:	Not Applicable	Project:	Mercy Housing AS220138B
Date Extracted:	01/31/25	Lab ID:	05-0261 mb 1/0.5
Date Analyzed:	01/31/25	Data File:	013106.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	90	79	128
Toluene-d8	91	84	121
4-Bromofluorobenzene	108	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 k	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 k	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1 k		

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AMW-04-37	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/31/25	Lab ID:	501267-02 1/5
Date Analyzed:	01/31/25	Data File:	013131.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	75	14	115
Phenol-d6	87	29	121
Nitrobenzene-d5	91	16	137
2-Fluorobiphenyl	90	46	122
2,4,6-Tribromophenol	86	17	154
Terphenyl-d14	91	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AMW-04-49	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/31/25	Lab ID:	501267-04 1/5
Date Analyzed:	01/31/25	Data File:	013132.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	65	14	115
Phenol-d6	79	29	121
Nitrobenzene-d5	79	16	137
2-Fluorobiphenyl	86	46	122
2,4,6-Tribromophenol	86	17	154
Terphenyl-d14	88	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AMW-04-56.5	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/31/25	Lab ID:	501267-06 1/5
Date Analyzed:	01/31/25	Data File:	013133.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	73	14	115
Phenol-d6	87	29	121
Nitrobenzene-d5	88	16	137
2-Fluorobiphenyl	93	46	122
2,4,6-Tribromophenol	98	17	154
Terphenyl-d14	93	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AMW-04-70	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/31/25	Lab ID:	501267-09 1/5
Date Analyzed:	02/01/25	Data File:	013134.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	60	14	115
Phenol-d6	77	29	121
Nitrobenzene-d5	77	16	137
2-Fluorobiphenyl	87	46	122
2,4,6-Tribromophenol	91	17	154
Terphenyl-d14	86	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	0.0048
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	0.0050
Naphthalene	<0.005	Pyrene	0.0053
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AMW-04-89	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/31/25	Lab ID:	501267-12 1/5
Date Analyzed:	02/01/25	Data File:	013135.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	72	14	115
Phenol-d6	85	29	121
Nitrobenzene-d5	88	16	137
2-Fluorobiphenyl	88	46	122
2,4,6-Tribromophenol	86	17	154
Terphenyl-d14	91	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AMW-04-92	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/31/25	Lab ID:	501267-13 1/5
Date Analyzed:	02/01/25	Data File:	013136.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	71	14	115
Phenol-d6	85	29	121
Nitrobenzene-d5	87	16	137
2-Fluorobiphenyl	93	46	122
2,4,6-Tribromophenol	91	17	154
Terphenyl-d14	87	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AMW-103-89	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/31/25	Lab ID:	501267-14 1/5
Date Analyzed:	02/01/25	Data File:	013137.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	70	14	115
Phenol-d6	81	29	121
Nitrobenzene-d5	82	16	137
2-Fluorobiphenyl	85	46	122
2,4,6-Tribromophenol	86	17	154
Terphenyl-d14	90	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	Aspect Consulting
Date Received:	Not Applicable	Project:	Mercy Housing AS220138B
Date Extracted:	01/31/25	Lab ID:	05-0309 mb3 1/5
Date Analyzed:	01/31/25	Data File:	013130.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	84	14	115
Phenol-d6	96	29	121
Nitrobenzene-d5	99	16	137
2-Fluorobiphenyl	104	46	122
2,4,6-Tribromophenol	93	17	154
Terphenyl-d14	102	31	167

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Pyridine	<0.5	Acenaphthylene	<0.0025
Phenol	<0.25	2,6-Dinitrotoluene	<0.25
Bis(2-chloroethyl) ether	<0.05	3-Nitroaniline	<5
2-Chlorophenol	<0.5	Acenaphthene	<0.0025
1,3-Dichlorobenzene	<0.05	2,4-Dinitrophenol	<1.5
1,4-Dichlorobenzene	<0.05	Dibenzofuran	<0.0025
1,2-Dichlorobenzene	<0.05	2,4-Dinitrotoluene	<0.25
Benzyl alcohol	<0.5	4-Nitrophenol	<1.5
2,2'-Oxybis(1-chloropropane)	<0.05	Diethyl phthalate	<0.5
2-Methylphenol	<0.5	Fluorene	<0.0025
Hexachloroethane	<0.05	4-Chlorophenyl phenyl ether	<0.05
N-Nitroso-di-n-propylamine	<0.05	N-Nitrosodiphenylamine	<0.05
3-Methylphenol + 4-Methylphenol	<1	4-Nitroaniline	<5
Nitrobenzene	<0.05	4,6-Dinitro-2-methylphenol	<1.5
Isophorone	<0.05	Hexachlorobenzene	<0.05
2-Nitrophenol	<0.5	Pentachlorophenol	<0.25
2,4-Dimethylphenol	<0.5	Phenanthrene	<0.0025
Benzoic acid	<2.5	Anthracene	<0.0025
Bis(2-chloroethoxy)methane	<0.05	Carbazole	<0.0025
2,4-Dichlorophenol	<0.5	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.05	Fluoranthene	<0.0025
Naphthalene	<0.005	Pyrene	<0.0025
Hexachlorobutadiene	<0.05	Benzyl butyl phthalate	<0.5
4-Chloroaniline	<5	Benz(a)anthracene	<0.005
4-Chloro-3-methylphenol	<0.5	Chrysene	<0.0025
2-Methylnaphthalene	<0.0025	Bis(2-ethylhexyl) phthalate	<0.8
1-Methylnaphthalene	<0.0025	Di-n-octyl phthalate	<0.5
Hexachlorocyclopentadiene	<0.15	Benzo(a)pyrene	<0.0025
2,4,6-Trichlorophenol	<0.5	Benzo(b)fluoranthene	<0.0025
2,4,5-Trichlorophenol	<0.5	Benzo(k)fluoranthene	<0.0025
2-Chloronaphthalene	<0.05	Indeno(1,2,3-cd)pyrene	<0.005
2-Nitroaniline	<0.25	Dibenz(a,h)anthracene	<0.005
Dimethyl phthalate	<0.5	Benzo(g,h,i)perylene	<0.005

Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-04-37	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/30/25	Lab ID:	501267-02
Date Analyzed:	01/31/25	Data File:	501267-02.058
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.3
Barium	63
Cadmium	<1
Chromium	21
Lead	6.4
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-04-49	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/30/25	Lab ID:	501267-04
Date Analyzed:	01/31/25	Data File:	501267-04.061
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.8
Barium	30
Cadmium	<1
Chromium	12
Lead	3.9
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-04-56.5	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/30/25	Lab ID:	501267-06
Date Analyzed:	01/31/25	Data File:	501267-06.062
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.3
Barium	47
Cadmium	<1
Chromium	18
Lead	3.4
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-04-70	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/30/25	Lab ID:	501267-09
Date Analyzed:	01/31/25	Data File:	501267-09.063
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.7
Barium	41
Cadmium	<1
Chromium	21
Lead	3.8
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-04-89	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/30/25	Lab ID:	501267-12
Date Analyzed:	01/31/25	Data File:	501267-12.064
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.2
Barium	98
Cadmium	<1
Lead	7.1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-04-89	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/30/25	Lab ID:	501267-12 x5
Date Analyzed:	02/03/25	Data File:	501267-12 x5.118
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Chromium	45

Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-04-92	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/30/25	Lab ID:	501267-13
Date Analyzed:	01/31/25	Data File:	501267-13.068
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.9
Barium	30
Cadmium	<1
Lead	2.1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-04-92	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/30/25	Lab ID:	501267-13 x5
Date Analyzed:	02/03/25	Data File:	501267-13 x5.119
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Chromium	12

Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-103-89	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/30/25	Lab ID:	501267-14
Date Analyzed:	01/31/25	Data File:	501267-14.069
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.3
Barium	78
Cadmium	<1
Lead	5.4
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-103-89	Client:	Aspect Consulting
Date Received:	01/21/25	Project:	Mercy Housing AS220138B
Date Extracted:	01/30/25	Lab ID:	501267-14 x5
Date Analyzed:	02/03/25	Data File:	501267-14 x5.120
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Chromium	34

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Aspect Consulting
Date Received:	NA	Project:	Mercy Housing AS220138B
Date Extracted:	01/30/25	Lab ID:	I5-88 mb
Date Analyzed:	01/30/25	Data File:	I5-88 mb.071
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	MG

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Date of Report: 02/05/25
Date Received: 01/21/25
Project: Mercy Housing AS220138B, F&BI 501267

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TPH AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code: 501267-02 (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)	40	87	70-130

Date of Report: 02/05/25
Date Received: 01/21/25
Project: Mercy Housing AS220138B, F&BI 501267

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 501257-17 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	800	112	106	64-136	6

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	96	78-121

Date of Report: 02/05/25
Date Received: 01/21/25
Project: Mercy Housing AS220138B, F&BI 501267

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 501267-06 (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	<0.5	48 vo	53	50-150	10
Chloromethane	mg/kg (ppm)	2	<0.5	67	65	50-150	3
Vinyl chloride	mg/kg (ppm)	2	<0.05	65	69	50-150	6
Bromomethane	mg/kg (ppm)	2	<0.5	57	71	50-150	22 vo
Chloroethane	mg/kg (ppm)	2	<0.5	67	72	50-150	7
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	68	69	50-150	1
Acetone	mg/kg (ppm)	10	<5	110	72	50-150	42 vo
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	80	80	50-150	0
Hexane	mg/kg (ppm)	2	<0.25	77	78	50-150	1
Methylene chloride	mg/kg (ppm)	2	1.6	102 b	127 b	50-150	22 b
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	81	79	50-150	2
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	76	76	50-150	0
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	81	81	50-150	0
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	80	82	50-150	2
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	78	78	50-150	0
Chloroform	mg/kg (ppm)	2	<0.05	82	80	50-150	2
2-Butanone (MEK)	mg/kg (ppm)	10	<1	99	77	50-150	25 vo
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	85	80	50-150	6
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	82	83	50-150	1
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	82	82	50-150	0
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	81	81	50-150	0
Benzene	mg/kg (ppm)	2	<0.03	85	83	50-150	2
Trichloroethene	mg/kg (ppm)	2	<0.02	78	76	50-150	3
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	75	72	50-150	4
Bromodichloromethane	mg/kg (ppm)	2	<0.05	80	74	50-150	8
Dibromomethane	mg/kg (ppm)	2	<0.05	81	76	50-150	6
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	84	80	50-150	5
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	76	75	50-150	1
Toluene	mg/kg (ppm)	2	<0.05	90	84	50-150	7
trans-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	78	73	50-150	7
1,1,2-Trichloroethane	mg/kg (ppm)	2	<0.05	91	84	50-150	8
2-Hexanone	mg/kg (ppm)	10	<1	98	89	50-150	10
1,3-Dichloropropane	mg/kg (ppm)	2	<0.05	84	73	50-150	14
Tetrachloroethene	mg/kg (ppm)	2	<0.025	91	84	50-150	8
Dibromochloromethane	mg/kg (ppm)	2	<0.05	84	78	50-150	7
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	91	83	50-150	9
Chlorobenzene	mg/kg (ppm)	2	<0.05	84	78	50-150	7
Ethylbenzene	mg/kg (ppm)	2	<0.05	93	86	50-150	8
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	84	81	50-150	4
m,p-Xylene	mg/kg (ppm)	4	<0.1	91	84	50-150	8
o-Xylene	mg/kg (ppm)	2	<0.05	91	85	50-150	7
Styrene	mg/kg (ppm)	2	<0.05	85	78	50-150	9
Isopropylbenzene	mg/kg (ppm)	2	<0.05	87	82	50-150	6
Bromoform	mg/kg (ppm)	2	<0.05	77	75	50-150	3
n-Propylbenzene	mg/kg (ppm)	2	<0.05	84	89	50-150	6
Bromobenzene	mg/kg (ppm)	2	<0.05	83	88	50-150	6
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	85	91	50-150	7
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	87	97	50-150	11
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	85	92	50-150	8
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	83	86	50-150	4
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	83	89	50-150	7
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	84	89	50-150	6
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	<0.05	84	89	50-150	6
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	83	88	50-150	6
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	85	90	50-150	6
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	82	89	50-150	8
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	83	88	50-150	6
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	87	88	50-150	1
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	82	93	50-150	13
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	88	89	50-150	1
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	82	90	50-150	9
Naphthalene	mg/kg (ppm)	2	<0.05	85	88	50-150	3
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	87	84	50-150	4

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Date Received: 01/21/25
Project: Mercy Housing AS220138B, F&BI 501267

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2	60	10-150
Chloromethane	mg/kg (ppm)	2	69	21-140
Vinyl chloride	mg/kg (ppm)	2	77	35-135
Bromomethane	mg/kg (ppm)	2	67	20-151
Chloroethane	mg/kg (ppm)	2	74	21-147
Trichlorofluoromethane	mg/kg (ppm)	2	75	47-143
Acetone	mg/kg (ppm)	10	163	13-169
1,1-Dichloroethene	mg/kg (ppm)	2	84	49-138
Hexane	mg/kg (ppm)	2	84	61-141
Methylene chloride	mg/kg (ppm)	2	80	25-146
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	85	65-129
trans-1,2-Dichloroethene	mg/kg (ppm)	2	79	62-126
1,1-Dichloroethane	mg/kg (ppm)	2	85	64-131
2,2-Dichloropropane	mg/kg (ppm)	2	88	76-150
cis-1,2-Dichloroethene	mg/kg (ppm)	2	82	62-127
Chloroform	mg/kg (ppm)	2	82	67-129
2-Butanone (MEK)	mg/kg (ppm)	10	122	19-171
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	88	73-123
1,1,1-Trichloroethane	mg/kg (ppm)	2	86	66-125
1,1-Dichloropropene	mg/kg (ppm)	2	86	70-131
Carbon tetrachloride	mg/kg (ppm)	2	85	53-135
Benzene	mg/kg (ppm)	2	87	70-130
Trichloroethene	mg/kg (ppm)	2	81	62-116
1,2-Dichloropropane	mg/kg (ppm)	2	80	70-130
Bromodichloromethane	mg/kg (ppm)	2	79	70-130
Dibromomethane	mg/kg (ppm)	2	83	70-130
4-Methyl-2-pentanone	mg/kg (ppm)	10	83	64-137
cis-1,3-Dichloropropene	mg/kg (ppm)	2	81	68-137
Toluene	mg/kg (ppm)	2	94	70-130
trans-1,3-Dichloropropene	mg/kg (ppm)	2	87	70-130
1,1,2-Trichloroethane	mg/kg (ppm)	2	94	70-130
2-Hexanone	mg/kg (ppm)	10	113	55-145
1,3-Dichloropropane	mg/kg (ppm)	2	82	70-130
Tetrachloroethene	mg/kg (ppm)	2	93	69-131
Dibromochloromethane	mg/kg (ppm)	2	90	61-137
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	93	70-130
Chlorobenzene	mg/kg (ppm)	2	87	70-130
Ethylbenzene	mg/kg (ppm)	2	96	70-130
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	91	56-134
m,p-Xylene	mg/kg (ppm)	4	94	70-130
o-Xylene	mg/kg (ppm)	2	95	70-130
Styrene	mg/kg (ppm)	2	87	70-130
Isopropylbenzene	mg/kg (ppm)	2	92	67-131
Bromoform	mg/kg (ppm)	2	90	70-130
n-Propylbenzene	mg/kg (ppm)	2	89	70-130
Bromobenzene	mg/kg (ppm)	2	92	70-130
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	92	70-130
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	94	70-130
1,2,3-Trichloropropane	mg/kg (ppm)	2	94	70-130
2-Chlorotoluene	mg/kg (ppm)	2	87	70-130
4-Chlorotoluene	mg/kg (ppm)	2	91	70-130
tert-Butylbenzene	mg/kg (ppm)	2	91	70-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	92	70-130
sec-Butylbenzene	mg/kg (ppm)	2	92	68-131
p-Isopropyltoluene	mg/kg (ppm)	2	93	70-130
1,3-Dichlorobenzene	mg/kg (ppm)	2	89	70-130
1,4-Dichlorobenzene	mg/kg (ppm)	2	90	70-130
1,2-Dichlorobenzene	mg/kg (ppm)	2	91	70-130
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	97	70-130
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	90	66-140
Hexachlorobutadiene	mg/kg (ppm)	2	84	67-141
Naphthalene	mg/kg (ppm)	2	87	69-119
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	87	66-138

Date of Report: 02/05/25
Date Received: 01/21/25
Project: Mercy Housing AS220138B, F&BI 501267

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270E

Laboratory Code: 501348-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Pyridine	mg/kg (ppm)	0.83	<0.5	63	60	10-108	5
Phenol	mg/kg (ppm)	0.83	<0.25	83	80	36-118	4
Bis(2-chloroethyl) ether	mg/kg (ppm)	0.83	<0.05	81	77	24-116	5
2-Chlorophenol	mg/kg (ppm)	0.83	<0.5	84	80	24-125	5
1,3-Dichlorobenzene	mg/kg (ppm)	0.83	<0.05	81	76	17-116	6
1,4-Dichlorobenzene	mg/kg (ppm)	0.83	<0.05	84	78	18-118	7
1,2-Dichlorobenzene	mg/kg (ppm)	0.83	<0.05	84	79	22-117	6
Benzyl alcohol	mg/kg (ppm)	4.2	<0.5	84	82	36-121	2
2,2'-Oxybis(1-chloropropane)	mg/kg (ppm)	0.83	<0.05	85	80	20-126	6
2-Methylphenol	mg/kg (ppm)	0.83	<0.5	86	83	38-120	4
Hexachloroethane	mg/kg (ppm)	0.83	<0.05	84	77	10-207	9
N-Nitroso-di-n-propylamine	mg/kg (ppm)	0.83	<0.05	87	85	10-176	2
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	0.83	<1	87	87	39-121	0
Nitrobenzene	mg/kg (ppm)	0.83	<0.05	96	89	10-186	8
Isophorone	mg/kg (ppm)	0.83	<0.05	91	87	29-155	4
2-Nitrophenol	mg/kg (ppm)	0.83	<0.5	84	83	16-148	1
2,4-Dimethylphenol	mg/kg (ppm)	0.83	<0.5	90	88	17-130	2
Benzoic acid	mg/kg (ppm)	2.5	<2.5	45	47	10-101	4
Bis(2-chloroethoxy)methane	mg/kg (ppm)	0.83	<0.05	91	85	37-121	7
2,4-Dichlorophenol	mg/kg (ppm)	0.83	<0.5	88	87	19-144	1
1,2,4-Trichlorobenzene	mg/kg (ppm)	0.83	<0.05	87	82	35-116	6
Naphthalene	mg/kg (ppm)	0.83	<0.005	88	84	28-125	5
Hexachlorobutadiene	mg/kg (ppm)	0.83	<0.05	92	83	25-126	10
4-Chloroaniline	mg/kg (ppm)	6.8	<5	94	83	21-117	12
4-Chloro-3-methylphenol	mg/kg (ppm)	0.83	<0.5	88	88	36-138	0
2-Methylnaphthalene	mg/kg (ppm)	0.83	<0.0025	86	86	10-192	0
1-Methylnaphthalene	mg/kg (ppm)	0.83	<0.0025	86	86	10-163	0
Hexachlorocyclopentadiene	mg/kg (ppm)	0.83	<0.15	84	84	10-136	0
2,4,6-Trichlorophenol	mg/kg (ppm)	0.83	<0.5	88	85	16-151	3
2,4,5-Trichlorophenol	mg/kg (ppm)	0.83	<0.5	91	89	20-139	2
2-Chloronaphthalene	mg/kg (ppm)	0.83	<0.05	90	86	42-117	5
2-Nitroaniline	mg/kg (ppm)	4.2	<0.25	106	109	50-150	3
Dimethyl phthalate	mg/kg (ppm)	0.83	<0.5	90	91	50-150	1
Acenaphthylene	mg/kg (ppm)	0.83	<0.0025	92	89	45-128	3
2,6-Dinitrotoluene	mg/kg (ppm)	0.83	<0.25	106	106	11-182	0
3-Nitroaniline	mg/kg (ppm)	4.2	<5	82	85	36-110	4
Acenaphthene	mg/kg (ppm)	0.83	<0.0025	89	87	36-125	2
2,4-Dinitrophenol	mg/kg (ppm)	1.7	<1.5	74	89	10-135	18
Dibenzofuran	mg/kg (ppm)	0.83	<0.0025	88	88	44-125	0
2,4-Dinitrotoluene	mg/kg (ppm)	0.83	<0.25	105	112	37-149	6
4-Nitrophenol	mg/kg (ppm)	1.7	<1.5	89	100	24-159	12
Diethyl phthalate	mg/kg (ppm)	0.83	<0.5	86	88	48-126	2
Fluorene	mg/kg (ppm)	0.83	<0.0025	89	90	48-121	1
4-Chlorophenyl phenyl ether	mg/kg (ppm)	0.83	<0.05	91	91	50-150	0
N-Nitrosodiphenylamine	mg/kg (ppm)	0.83	<0.05	96	91	10-190	5
4-Nitroaniline	mg/kg (ppm)	4.2	<5	78	85	10-150	9
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	0.83	<1.5	99	110	10-148	11
Hexachlorobenzene	mg/kg (ppm)	0.83	<0.05	94	88	50-150	7
Pentachlorophenol	mg/kg (ppm)	0.83	<0.25	100	102	18-159	2
Phenanthrene	mg/kg (ppm)	0.83	<0.0025	92	90	46-122	2
Anthracene	mg/kg (ppm)	0.83	<0.0025	94	92	30-144	2
Carbazole	mg/kg (ppm)	0.83	<0.0025	94	97	50-150	3
Di-n-butyl phthalate	mg/kg (ppm)	0.83	<0.5	85	87	43-124	2
Fluoranthene	mg/kg (ppm)	0.83	0.0040	96	94	50-150	2
Pyrene	mg/kg (ppm)	0.83	0.0048	90	90	40-134	0
Benzyl butyl phthalate	mg/kg (ppm)	0.83	<0.5	73	77	14-187	5
Benz(a)anthracene	mg/kg (ppm)	0.83	<0.005	89	89	50-150	0
Chrysene	mg/kg (ppm)	0.83	0.0026	90	89	50-150	1
Bis(2-ethylhexyl) phthalate	mg/kg (ppm)	0.83	<0.8	76	80	45-130	5
Di-n-octyl phthalate	mg/kg (ppm)	0.83	<0.5	75	79	25-161	5
Benzo(a)pyrene	mg/kg (ppm)	0.83	0.0045	91	89	50-150	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	0.0046	91	87	50-150	4
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	<0.0025	95	92	50-150	3
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	0.0048	92	93	40-140	1
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	<0.005	94	96	41-136	2
Benzo(g,h,i)perylene	mg/kg (ppm)	0.83	<0.03	93	95	29-139	2

Date of Report: 02/05/25
Date Received: 01/21/25
Project: Mercy Housing AS220138B, F&BI 501267

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270E

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Pyridine	mg/kg (ppm)	0.83	79	20-82
Phenol	mg/kg (ppm)	0.83	91	47-128
Bis(2-chloroethyl) ether	mg/kg (ppm)	0.83	90	35-131
2-Chlorophenol	mg/kg (ppm)	0.83	89	58-111
1,3-Dichlorobenzene	mg/kg (ppm)	0.83	91	47-109
1,4-Dichlorobenzene	mg/kg (ppm)	0.83	95	46-110
1,2-Dichlorobenzene	mg/kg (ppm)	0.83	93	50-110
Benzyl alcohol	mg/kg (ppm)	4.2	93	36-147
2,2'-Oxybis(1-chloropropane)	mg/kg (ppm)	0.83	94	54-113
2-Methylphenol	mg/kg (ppm)	0.83	96	60-114
Hexachloroethane	mg/kg (ppm)	0.83	92	45-111
N-Nitroso-di-n-propylamine	mg/kg (ppm)	0.83	95	70-130
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	0.83	96	66-112
Nitrobenzene	mg/kg (ppm)	0.83	102	59-111
Isophorone	mg/kg (ppm)	0.83	99	52-128
2-Nitrophenol	mg/kg (ppm)	0.83	87	60-121
2,4-Dimethylphenol	mg/kg (ppm)	0.83	97	53-119
Benzoic acid	mg/kg (ppm)	2.5	62	13-223
Bis(2-chloroethoxy)methane	mg/kg (ppm)	0.83	98	64-112
2,4-Dichlorophenol	mg/kg (ppm)	0.83	96	63-111
1,2,4-Trichlorobenzene	mg/kg (ppm)	0.83	94	56-111
Naphthalene	mg/kg (ppm)	0.83	97	57-107
Hexachlorobutadiene	mg/kg (ppm)	0.83	99	49-119
4-Chloroaniline	mg/kg (ppm)	6.8	101	10-136
4-Chloro-3-methylphenol	mg/kg (ppm)	0.83	98	70-130
2-Methylnaphthalene	mg/kg (ppm)	0.83	97	63-112
1-Methylnaphthalene	mg/kg (ppm)	0.83	97	63-113
Hexachlorocyclopentadiene	mg/kg (ppm)	0.83	92	46-127
2,4,6-Trichlorophenol	mg/kg (ppm)	0.83	94	65-116
2,4,5-Trichlorophenol	mg/kg (ppm)	0.83	97	67-117
2-Chloronaphthalene	mg/kg (ppm)	0.83	100	67-109
2-Nitroaniline	mg/kg (ppm)	4.2	89	46-148
Dimethyl phthalate	mg/kg (ppm)	0.83	99	70-130
Acenaphthylene	mg/kg (ppm)	0.83	101	70-130
2,6-Dinitrotoluene	mg/kg (ppm)	0.83	114	70-130
Acenaphthene	mg/kg (ppm)	0.83	99	66-112
2,4-Dinitrophenol	mg/kg (ppm)	1.7	97	63-132
Dibenzofuran	mg/kg (ppm)	0.83	99	63-117
2,4-Dinitrotoluene	mg/kg (ppm)	0.83	115	52-140
4-Nitrophenol	mg/kg (ppm)	1.7	98	16-187
Diethyl phthalate	mg/kg (ppm)	0.83	94	64-120
Fluorene	mg/kg (ppm)	0.83	100	67-117
4-Chlorophenyl phenyl ether	mg/kg (ppm)	0.83	102	70-130
N-Nitrosodiphenylamine	mg/kg (ppm)	0.83	103	61-118
4-Nitroaniline	mg/kg (ppm)	4.2	76	28-121
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	0.83	105	51-152
Hexachlorobenzene	mg/kg (ppm)	0.83	103	70-130
Pentachlorophenol	mg/kg (ppm)	0.83	105	60-133
Phenanthrene	mg/kg (ppm)	0.83	101	70-130
Anthracene	mg/kg (ppm)	0.83	103	70-130
Carbazole	mg/kg (ppm)	0.83	97	63-122
Di-n-butyl phthalate	mg/kg (ppm)	0.83	91	48-128
Fluoranthene	mg/kg (ppm)	0.83	106	70-130
Pyrene	mg/kg (ppm)	0.83	97	70-130
Benzyl butyl phthalate	mg/kg (ppm)	0.83	72	64-135
Benz(a)anthracene	mg/kg (ppm)	0.83	98	70-130
Chrysene	mg/kg (ppm)	0.83	99	70-130
Bis(2-ethylhexyl) phthalate	mg/kg (ppm)	0.83	78	59-116
Di-n-octyl phthalate	mg/kg (ppm)	0.83	76	46-129
Benzo(a)pyrene	mg/kg (ppm)	0.83	98	68-120
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	98	67-128
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	104	70-130
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	97	67-129
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	100	67-128
Benzo(g,h,i)perylene	mg/kg (ppm)	0.83	99	65-130

Date of Report: 02/05/25
Date Received: 01/21/25
Project: Mercy Housing AS220138B, F&BI 501267

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 501428-02 (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	97	93	75-125	4
Barium	mg/kg (ppm)	50	62.1	130 b	126 b	75-125	3 b
Cadmium	mg/kg (ppm)	10	<1	98	96	75-125	2
Chromium	mg/kg (ppm)	50	2.08	102	96	75-125	6
Lead	mg/kg (ppm)	50	86.8	198 b	89 b	75-125	76 b
Mercury	mg/kg (ppm	5	<1	98	95	75-125	3
Selenium	mg/kg (ppm)	5	<1	88	86	75-125	2
Silver	mg/kg (ppm)	10	<1	94	94	75-125	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	102	80-120
Barium	mg/kg (ppm)	50	101	80-120
Cadmium	mg/kg (ppm)	10	101	80-120
Chromium	mg/kg (ppm)	50	104	80-120
Lead	mg/kg (ppm)	50	101	80-120
Mercury	mg/kg (ppm)	5	101	80-120
Selenium	mg/kg (ppm)	5	102	80-120
Silver	mg/kg (ppm)	10	104	80-120

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, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. 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 between the method detection limit and the lowest calibration point. 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.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

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.

501267

SAMPLE CHAIN OF CUSTODY 01/21/25 N3/A2

Report To Ali Cochrane, Hannah Cohen
Company Aspect Consulting
Address 710 2nd Ave, Suite #550
City, State, ZIP Seattle, WA
Phone _____ Email Ali.cochrane + Hannah.Cohen @aspectconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: Mercy Housing
PO #: AS220138 B

REMARKS
Project specific RLs? - Yes / No

INVOICE TO

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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	SVOCs	RCRA metals			X-per HC 01/30/25 ME Notes
AMW-04-31.5	01 A-E	1/20/25	1140	S	5												~~HOLD~~
AMW-04-37	02		1225			X	X			X			X	X			
AMW-04-43	03		1310														
AMW-04-49	04		1440			X	X			X			X	X			
AMW-04-53	05		~~1530~~ 1530														
AMW-04-56.5	06		1600			X	X			X			X	X			
AMW-04-62	07		1650														
AMW-04-68	08	1/21/25	0910														
AMW-04-70	09		1040			X	X			X			X	X			
AMW-04-78	10		1115														

ANALYSES REQUESTED

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Favour Equna	Aspect	1/21/25	1730
Received by:	VINH	FBI	1-21-25	1730
Relinquished by:		Samples received at 4 °C		
Received by:				

501267

SAMPLE CHAIN OF CUSTODY

01/21/25 N3/A2

Page # 2 of 2

Report To Ali Cochrane + Hannah Cohen

Company Aspect Consulting

Address 710 2nd Ave, Suite #550

City, State, ZIP Seattle, WA

Phone _____ Email Ali-Cochrane + Hannah-Cohen @ aspectconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: Mercy Housing

PO #: AS220138B

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

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: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	SVOCs	RCRA Metals			Notes
AMW-04-82	11 A-E	1/21/25	1325	S	5												~~HOLD~~
AMW-04-89	12	1/21/25	1355			X	X			X			X	X			
AMW-04-92	13	1/21/25	1445			X	X			X			X	X			
AMW-103-59	14	1/21/25	1025			X	X			X			X	X			

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Favour Eguna	Aspect	1/21/25	1730
Received by:	VINH	FBI	1-21-25	1730
Relinquished by:		Samples received at 4 °C		
Received by:				

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 501267 CLIENT Aspect INITIALS/DATE: RV 1-21-25

If custody seals are present on cooler, are they intact? ☐ NA ☐ YES ☐ NO

Cooler/Sample temperature 4 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☑ YES ☐ NO

How did samples arrive?
☑ Over the Counter ☐ Picked up by F&BI ☐ FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/Date: AP 01/22/25
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 0-1 days

Are the samples clearly identified? (explain "no" answer below) ☐ YES ☑ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☑ YES ☐ NO

Were appropriate sample containers used? ☑ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☑ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☑ NA ☐ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?
(explain "no" answer below)

Sample ID's	☑ Yes ☐ No		☐ Not on COC/label
Date Sampled	☑ Yes ☐ No		☐ Not on COC/label
Time Sampled	☐ Yes ☑ No	Time on label 10:10 for AMW-04-70 (09A-E)	☐ Not on COC/label
# of Containers	☑ Yes ☐ No		
Relinquished	☑ Yes ☐ No		
Requested analysis	☑ Yes ☐ On Hold		

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? ☑ NA ☐ YES ☐ NO

Number of unused TO15 canisters _____ **Number of unused TO17 tubes** _____

February 7, 2025

Michael Erdahl
Friedman & Bruya
5500 4th Ave S.
Seattle, WA 98108-2419

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 2501809.00

Client Project: 501231
Location: N-A

Dear Mr. Erdahl,

Enclosed please find test results for the 2 sample(s) submitted to our laboratory for analysis on 1/30/2025.

Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with **U. S. EPA 40 CFR Appendix E to Subpart E of Part 763**, Interim Method for the Determination of Asbestos in Bulk Insulation Samples and **EPA 600/R-93/116**, Method for the Determination of Asbestos in Bulk Building Materials.

For samples containing more than one separable layer of materials, the report will include findings for each layer (labeled Layer 1 and Layer 2, etc. for each individual layer). The asbestos concentration in the sample is determined by calibrated visual estimation.

For those samples with asbestos concentrations between 1 and 10 percent based on visual estimation, the EPA recommends a procedure known as point counting (NESHAPS, 40 CFR Part 61). Point counting is a statistically more accurate means of quantification for samples with low concentrations of asbestos.

The detection limit for the calibrated visual estimation is <1%, 400 point counts is 0.25% and 1000 point counts is 0.1%

Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. Please do not hesitate to call if there is anything further we can assist you with.

Sincerely,

Hilary Crumley, Manager Asbestos Laboratory

NVLAP Testing
Lab Code: 102063-0

Enc.: Sample Results

Phone: 206 547.0100 | Fax: 206 634.1936 | Toll Free: 1.888.NVL.LABS (685.5227)
4708 Aurora Avenue North | Seattle, WA 98103-6516

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Friedman & Bruya
Address: 5500 4th Ave S.
Seattle, WA 98108-2419

Attention: Mr. Michael Erdahl
Project Location: N-A

Batch #: 2501809.00
Client Project #: 501231
Date Received: 1/30/2025
Samples Received: 2
Samples Analyzed: 2
Method: EPA/600/R-93/116

Lab ID: 250010954 **Client Sample #: AMW-04-4**

Location: N-A

Comments: Qualitative analysis was conducted for the presence of asbestos fibers in this sample.

Layer 1 of 1 **Description:** Loose brownish gray gravelly material with debris

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Organic debris, Wood flakes, Burnt wood fragments	Cellulose	**None Detected ND**
Debris, Gravel	Synthetic fibers	

Lab ID: 250010955 **Client Sample #: AMW-04-8.5**

Location: N-A

Comments: Qualitative analysis was conducted for the presence of asbestos fibers in this sample.

Layer 1 of 1 **Description:** Loose gray sandy and gravelly material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Gravel, Sand, Fine grains	Cellulose	**None Detected ND**

Sampled by: Client
Analyzed by: Michelle Seidl **Date:** 02/04/2025
Reviewed by: Hilary Crumley **Date:** 02/07/2025

Hilary Crumley, Manager Asbestos Laboratory

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and EPA 40 CFR Appendix E to Subpart E of Part 763 with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

ASBESTOS LABORATORY SERVICES

Company	Friedman & Bruya	**NVL Batch Number**	**2501809.00**
Address	5500 4th Ave S. Seattle, WA 98108-2419	**TAT**	5 Days **AH** No
		Rush TAT	
Project Manager	Mr. Michael Erdahl	**Due Date**	2/6/2025 **Time** 1:30 PM
Phone	(206) 285-8282	**Email**	merdahl@friedmanandbruya.com
		Fax	(206) 283-5044

Project Name/Number: 501231 **Project Location:** N-A

Subcategory PLM Bulk

Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 2 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	250010954	AMW-04-4		A
2	250010955	AMW-04-8.5		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Courier				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Kelly AuVu		NVL	1/30/25	1330
Analyzed by	Michelle Seidl		NVL	2/4/25	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 1/30/2025
Time: 1:55 PM
Entered By: Laura Carcone

2501809

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 5500 4th Ave S

City, State, ZIP Seattle, WA 98108

Phone # (206) 285-8282 merdahl@friedmanandbruya.com

SUBCONTRACTER
NVL

PROJECT NAME/NO.	PO #
501231	F-52

REMARKS

TURNAROUND TIME
☒ Standard TAT
☐ RUSH
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: Asbestos										Notes
AMW-04-4		1/17/2025	1040	soil	1	x										
AMW-04-8.5		1/17/2025	1110	soil	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	1/30/25	1100
Received by:		Kelly Arthur	NVL	1/30/25	1330 Can
Relinquished by:					
Received by:					

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

February 11, 2025

Ali Cochrane, Project Manager
Aspect Consulting
710 2nd Ave S, Suite 550
Seattle, WA 98104

Dear Ms Cochrane:

Included are the additional results from the testing of material submitted on January 17, 2025 from the Mercy Housing AS220138B, F&BI 501231 project. There is 1 page 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: Aspect Data, Hannah Cohen
ASP0211R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 17, 2025 by Friedman & Bruya, Inc. from the Aspect Consulting Mercy Housing AS220138B, F&BI 501231 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Aspect Consulting
501231 -01	AB-07-67
501231 -02	AB-07-72.5
501231 -03	AB-07-77
501231 -04	AB-07-84
501231 -05	AB-07-87.5
501231 -06	AB-07-94
501231 -07	AB-07-96.5
501231 -08	AB-07-102
501231 -09	AB-07-107.5
501231 -10	AMW-04-1.5
501231 -11	AMW-04-4
501231 -12	AMW-04-7
501231 -13	AMW-04-8.5
501231 -14	AMW-04-11
501231 -15	AMW-04-14
501231 -16	AMW-04-17
501231 -17	AMW-04-19
501231 -18	AMW-04-22.5
501231 -19	AMW-04-27

Samples AMW-04-4 and AMW-04-8.5 were sent to NVL for asbestos analysis. The report is enclosed.

50 1231

SAMPLE CHAIN OF CUSTODY

01/17/25 N3/A3

AP

Page # 1 of 2 01/20

Report To Ali Cochrane, Hannah Cohen

Company Aspect Consulting

Address 710 2nd Ave, Suite 1550

City, State, ZIP Seattle, WA

Phone ____ Email Ali.Cochrane + Hannah Cohen @aspectconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: Mercy Housing

PO #: AS220138B

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

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: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	SVOCs	RCRA Metals	Asbestos		X-per HC 01/22/25 ME Notes
AB-07-67	01 A-E	1/15/25	0850	S	5												~~HOLD~~
AB-07-72.5	02		1005			X	X			X			X	X			
AB-07-77	03		1145														
AB-07-84	04		1430			X	X			X			X	X			
AB-07-87.5	05		1520														
AB-07-94	06	1/16/25	0855														
AB-07-96.5	07		0955														
AB-07-102	08		1105														
AB-07-107.5	09		1155			X	X			X			X	X			
AMW-04-1.5	10	1/17/25	1030			X	X			X			X	X			

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Favour Epuna	Aspect	1/17/25	1641
Received by:	VINH	FB1	1-17-25	1641
Relinquished by:		Samples received at 4 °C		
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

501231

SAMPLE CHAIN OF CUSTODY

01/17/25 N3/A3

Page # 2 of 2

Report To Ali Cochrane + Hannah Cohen

Company Aspect Consulting

Address 710 2nd Ave, Suite #550

City, State, ZIP Seattle, WA

Phone _____ Email Ali.Cochrane + Hannah Cohen @aspectconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: Mercy Housing

PO #: AS220138B

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

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: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	SVOCs	RCRA metals	Asbestos		A-per HC 01/30/25 ME Notes
AMW-04-4	11 A-F	1/17/25	1040	S	6										A		~~HOLD~~
AMW-04-7	12 A-E		1100		5	X	X			X			X	X			
AMW-04-8.5	13 A-F		1110		6										A		
AMW-04-11	14 A-E		1135		5												
AMW-04-14	15		1145														
AMW-04-17	16		1200														
AMW-04-19	17		1210														
AMW-04-22.5	18		1240														
AMW-04-27	19		1255														

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Favour Epuna	Aspect	1/17/25	1641
Received by:	~~FB~~ ~~FB~~ VNH	FB	1-17-25	1641
Relinquished by:		Samples received at 4 °C		
Received by:				

Friedman & Bruya, Inc.
Ph. (206) 285-8282

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 501231 AP CLIENT Aspect INITIALS: RR DATE: 1-17-25

If custody seals are present on cooler, are they intact? ☒ NA ☐ YES ☐ NO

Cooler/Sample temperature 4 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☒ YES ☐ NO

How did samples arrive?
☐ Over the Counter ☒ Picked up by F&BI ☐ FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? ☒ YES ☐ NO Initials/Date: AP 01/20/25
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 0-2 days

Are the samples clearly identified? (explain "no" answer below) ☒ YES ☐ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☒ YES ☐ NO

Were appropriate sample containers used? ☒ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☒ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☒ NA ☐ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?
(explain "no" answer below)

Sample ID's	☒ Yes ☐ No	☐ Not on COC/label
Date Sampled	☒ Yes ☐ No	☐ Not on COC/label
Time Sampled	☒ Yes ☐ No	☐ Not on COC/label
# of Containers	☒ Yes ☐ No	
Relinquished	☒ Yes ☐ No	
Requested analysis	☒ Yes ☐ On Hold	

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? ☒ NA ☐ YES ☐ NO

Number of unused TO15 canisters _____ **Number of unused TO17 tubes** _____

February 7, 2025

Michael Erdahl
Friedman & Bruya
5500 4th Ave S.
Seattle, WA 98108-2419

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 2501809.00

Client Project: 501231
Location: N-A

Dear Mr. Erdahl,

Enclosed please find test results for the 2 sample(s) submitted to our laboratory for analysis on 1/30/2025.

Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with **U. S. EPA 40 CFR Appendix E to Subpart E of Part 763**, Interim Method for the Determination of Asbestos in Bulk Insulation Samples and **EPA 600/R-93/116**, Method for the Determination of Asbestos in Bulk Building Materials.

For samples containing more than one separable layer of materials, the report will include findings for each layer (labeled Layer 1 and Layer 2, etc. for each individual layer). The asbestos concentration in the sample is determined by calibrated visual estimation.

For those samples with asbestos concentrations between 1 and 10 percent based on visual estimation, the EPA recommends a procedure known as point counting (NESHAPS, 40 CFR Part 61). Point counting is a statistically more accurate means of quantification for samples with low concentrations of asbestos.

The detection limit for the calibrated visual estimation is <1%, 400 point counts is 0.25% and 1000 point counts is 0.1%

Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. Please do not hesitate to call if there is anything further we can assist you with.

Sincerely,

Hilary Crumley, Manager Asbestos Laboratory

NVLAP Testing
Lab Code: 102063-0

Enc.: Sample Results

Phone: 206 547.0100 | Fax: 206 634.1936 | Toll Free: 1.888.NVL.LABS (685.5227)
4708 Aurora Avenue North | Seattle, WA 98103-6516

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Friedman & Bruya
Address: 5500 4th Ave S.
Seattle, WA 98108-2419

Attention: Mr. Michael Erdahl
Project Location: N-A

Batch #: 2501809.00
Client Project #: 501231
Date Received: 1/30/2025
Samples Received: 2
Samples Analyzed: 2
Method: EPA/600/R-93/116

Lab ID: 250010954 **Client Sample #: AMW-04-4**

Location: N-A

Comments: Qualitative analysis was conducted for the presence of asbestos fibers in this sample.

Layer 1 of 1 **Description:** Loose brownish gray gravelly material with debris

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Organic debris, Wood flakes, Burnt wood fragments	Cellulose	**None Detected ND**
Debris, Gravel	Synthetic fibers	

Lab ID: 250010955 **Client Sample #: AMW-04-8.5**

Location: N-A

Comments: Qualitative analysis was conducted for the presence of asbestos fibers in this sample.

Layer 1 of 1 **Description:** Loose gray sandy and gravelly material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Gravel, Sand, Fine grains	Cellulose	**None Detected ND**

Sampled by: Client
Analyzed by: Michelle Seidl **Date:** 02/04/2025
Reviewed by: Hilary Crumley **Date:** 02/07/2025

Hilary Crumley, Manager Asbestos Laboratory

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and EPA 40 CFR Appendix E to Subpart E of Part 763 with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

ASBESTOS LABORATORY SERVICES

Company	Friedman & Bruya	**NVL Batch Number**	**2501809.00**
Address	5500 4th Ave S. Seattle, WA 98108-2419	**TAT**	5 Days **AH** No
		Rush TAT	
Project Manager	Mr. Michael Erdahl	**Due Date**	2/6/2025 **Time** 1:30 PM
Phone	(206) 285-8282	**Email**	merdahl@friedmanandbruya.com
		Fax	(206) 283-5044

Project Name/Number: 501231 **Project Location:** N-A

Subcategory PLM Bulk

Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 2 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	250010954	AMW-04-4		A
2	250010955	AMW-04-8.5		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Courier				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Kelly AuVu		NVL	1/30/25	1330
Analyzed by	Michelle Seidl		NVL	2/4/25	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 1/30/2025
Time: 1:55 PM
Entered By: Laura Carcone

2501809

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 5500 4th Ave S

City, State, ZIP Seattle, WA 98108

Phone # (206) 285-8282 merdahl@friedmanandbruya.com

SUBCONTRACTER
NVL

PROJECT NAME/NO.	PO #
501231	F-52

REMARKS

TURNAROUND TIME
☒ Standard TAT
☐ RUSH
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: Asbestos										Notes
AMW-04-4		1/17/2025	1040	soil	1	x										
AMW-04-8.5		1/17/2025	1110	soil	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	1/30/25	1100
Received by:		Kelly Arthur	NVL	1/30/25	1330 Can
Relinquished by:					
Received by:					

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

March 26, 2025

Ali Cochrane, Project Manager
Aspect Consulting
710 2nd Ave S, Suite 550
Seattle, WA 98104

Dear Ms Cochrane:

Included are the results from the testing of material submitted on March 18, 2025 from the Mercy Housing 35P AS220138, F&BI 503287 project. There are 68 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: Aspect Data, Hannah Cohen
ASP0326R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 18, 2025 by Friedman & Bruya, Inc. from the Aspect Consulting Mercy Housing 35P AS220138, F&BI 503287 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Aspect Consulting
503287 -01	AGP-01-2
503287 -02	AGP-01-5
503287 -03	AGP-01-7.5
503287 -04	AGP-01-10
503287 -05	AGP-01-12.5
503287 -06	AGP-03-2
503287 -07	AGP-03-5
503287 -08	AGP-03-7.5
503287 -09	AGP-03-10
503287 -10	AGP-101-10
503287 -11	AGP-03-12.5
503287 -12	AB-02-2
503287 -13	AB-02-10
503287 -14	AB-02-5
503287 -15	AB-02-13
503287 -16	AB-01-2.5
503287 -17	AB-01-5
503287 -18	AB-01-10
503287 -19	AB-01-7.5
503287 -20	AB-01-13
503287 -21	AB-101-13
503287 -22	AGP-02-1.5
503287 -23	AGP-02-5
503287 -24	AGP-02-8
503287 -25	AGP-02-10
503287 -26	AGP-02-12.5
503287 -27	Trip Blank

The 8260D calibration standard did not meet the acceptance criteria for acetone and 2-butanone. The data were flagged accordingly.

Selenium in the 6020B matrix spike duplicate did not meet the acceptance criteria. The laboratory control sample passed the acceptance criteria, therefore the results were due to matrix effect.

All other quality control requirements were acceptable.

Date of Report: 03/26/25
Date Received: 03/18/25
Project: Mercy Housing 35P AS220138, F&BI 503287
Date Extracted: 03/21/24
Date Analyzed: 03/21/24

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)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
AGP-01-2 503287-01	<5	107
AGP-01-7.5 503287-03	<5	104
AGP-01-12.5 503287-05	<5	106
AGP-03-2 503287-06	<5	107
AGP-03-10 503287-09	<5	103
AGP-101-10 503287-10	<5	106
AGP-03-12.5 503287-11	<5	107
AB-02-2 503287-12	<5	108
AB-02-5 503287-14	<5	102
AB-02-13 503287-15	<5	108

Date of Report: 03/26/25
Date Received: 03/18/25
Project: Mercy Housing 35P AS220138, F&BI 503287
Date Extracted: 03/21/24
Date Analyzed: 03/21/24

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)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
AB-01-2.5 503287-16	<5	104
AB-01-10 503287-18	8.1	111
AB-01-13 503287-20	<5	108
AB-101-13 503287-21	<5	105
AGP-02-1.5 503287-22	<5	109
AGP-02-8 503287-24	<5	110
AGP-02-12.5 503287-26	<5	107
Method Blank 05-647 MB	<5	108

Date of Report: 03/26/25
Date Received: 03/18/25
Project: Mercy Housing 35P AS220138, F&BI 503287
Date Extracted: 03/19/25
Date Analyzed: 03/19/25

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)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
AGP-01-2 503287-01	<50	<250	83
AGP-01-7.5 503287-03	<50	<250	79
AGP-01-12.5 503287-05	<50	<250	78
AGP-03-2 503287-06	<50	<250	81
AGP-03-10 503287-09	<50	<250	80
AGP-101-10 503287-10	<50	<250	81
AGP-03-12.5 503287-11	<50	<250	81
AB-02-2 503287-12	<50	<250	79
AB-02-5 503287-14	<50	<250	79
AB-02-13 503287-15	<50	<250	81
AB-01-2.5 503287-16	<50	<250	81
AB-01-10 503287-18	120	730	86

Date of Report: 03/26/25
Date Received: 03/18/25
Project: Mercy Housing 35P AS220138, F&BI 503287
Date Extracted: 03/19/25
Date Analyzed: 03/19/25

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)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
AB-01-13 503287-20	<50	<250	80
AB-101-13 503287-21	<50	<250	81
AGP-02-1.5 503287-22	<50	<250	78
AGP-02-8 503287-24	<50	<250	82
AGP-02-12.5 503287-26	<50	<250	77
Method Blank 05-709 MB	<50	<250	79

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AGP-01-2	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/20/25	Lab ID:	503287-01 1/0.5
Date Analyzed:	03/20/25	Data File:	032026.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	79	128
Toluene-d8	102	84	121
4-Bromofluorobenzene	100	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 ca	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AGP-01-7.5	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/20/25	Lab ID:	503287-03 1/0.5
Date Analyzed:	03/20/25	Data File:	032027.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	79	128
Toluene-d8	103	84	121
4-Bromofluorobenzene	102	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 ca	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.0056	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AGP-01-12.5	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/20/25	Lab ID:	503287-05 1/0.5
Date Analyzed:	03/20/25	Data File:	032028.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	79	128
Toluene-d8	98	84	121
4-Bromofluorobenzene	96	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 ca	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AGP-03-2	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/20/25	Lab ID:	503287-06 1/0.5
Date Analyzed:	03/20/25	Data File:	032029.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	92	79	128
Toluene-d8	96	84	121
4-Bromofluorobenzene	98	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 ca	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AGP-03-10	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/20/25	Lab ID:	503287-09 1/0.5
Date Analyzed:	03/20/25	Data File:	032030.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	79	128
Toluene-d8	94	84	121
4-Bromofluorobenzene	98	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 ca	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.0058	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AGP-101-10	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/20/25	Lab ID:	503287-10 1/0.5
Date Analyzed:	03/20/25	Data File:	032031.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	79	128
Toluene-d8	99	84	121
4-Bromofluorobenzene	100	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 ca	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.0059	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AGP-03-12.5	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/20/25	Lab ID:	503287-11 1/0.5
Date Analyzed:	03/20/25	Data File:	032032.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	79	128
Toluene-d8	98	84	121
4-Bromofluorobenzene	99	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 ca	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.0057	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-02-2	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/20/25	Lab ID:	503287-12 1/0.5
Date Analyzed:	03/20/25	Data File:	032033.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	79	128
Toluene-d8	99	84	121
4-Bromofluorobenzene	99	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 ca	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-02-5	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/20/25	Lab ID:	503287-14 1/0.5
Date Analyzed:	03/20/25	Data File:	032034.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	79	128
Toluene-d8	98	84	121
4-Bromofluorobenzene	98	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 ca	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.019	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-02-13	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/20/25	Lab ID:	503287-15 1/0.5
Date Analyzed:	03/20/25	Data File:	032035.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	79	128
Toluene-d8	100	84	121
4-Bromofluorobenzene	107	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 ca	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-01-2.5	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/20/25	Lab ID:	503287-16 1/0.5
Date Analyzed:	03/20/25	Data File:	032036.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	79	128
Toluene-d8	100	84	121
4-Bromofluorobenzene	99	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 ca	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-01-10	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/20/25	Lab ID:	503287-18 1/0.5
Date Analyzed:	03/20/25	Data File:	032037.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	79	128
Toluene-d8	98	84	121
4-Bromofluorobenzene	97	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 ca	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.0052	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	0.016
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-01-13	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/20/25	Lab ID:	503287-20 1/0.5
Date Analyzed:	03/20/25	Data File:	032038.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	79	128
Toluene-d8	100	84	121
4-Bromofluorobenzene	100	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 ca	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.0070	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-101-13	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/20/25	Lab ID:	503287-21 1/0.5
Date Analyzed:	03/20/25	Data File:	032039.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	79	128
Toluene-d8	97	84	121
4-Bromofluorobenzene	100	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 ca	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AGP-02-1.5	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/20/25	Lab ID:	503287-22 1/0.5
Date Analyzed:	03/20/25	Data File:	032040.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	79	128
Toluene-d8	101	84	121
4-Bromofluorobenzene	101	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 ca	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.022	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AGP-02-8	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/20/25	Lab ID:	503287-24 1/0.5
Date Analyzed:	03/20/25	Data File:	032041.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	79	128
Toluene-d8	101	84	121
4-Bromofluorobenzene	102	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 ca	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AGP-02-12.5	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/20/25	Lab ID:	503287-26 1/0.5
Date Analyzed:	03/20/25	Data File:	032042.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	79	128
Toluene-d8	100	84	121
4-Bromofluorobenzene	100	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 ca	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.0053	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	Method Blank	Client:	Aspect Consulting
Date Received:	Not Applicable	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/20/25	Lab ID:	05-0565 mb 1/0.5
Date Analyzed:	03/20/25	Data File:	032025.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	79	128
Toluene-d8	98	84	121
4-Bromofluorobenzene	102	84	116

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5 ca	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1 ca	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	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	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AGP-01-2	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-01
Date Analyzed:	03/19/25	Data File:	031911.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	108	50	150
Benz(a)anthracene-d12	96	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	0.0050
Anthracene	<0.005
Fluoranthene	0.0092
Pyrene	0.0083
Benz(a)anthracene	<0.005
Chrysene	0.0081
Benzo(b)fluoranthene	0.0091
Benzo(k)fluoranthene	<0.005
Benzo(a)pyrene	0.0059
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	0.011

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AGP-01-7.5	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-03
Date Analyzed:	03/19/25	Data File:	031912.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	110	50	150
Benz(a)anthracene-d12	97	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	0.014
Anthracene	<0.005
Fluoranthene	0.017
Pyrene	0.021
Benz(a)anthracene	0.0092
Chrysene	0.012
Benzo(b)fluoranthene	0.013
Benzo(k)fluoranthene	<0.005
Benzo(a)pyrene	0.011
Indeno(1,2,3-cd)pyrene	0.0086
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	0.017

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AGP-01-12.5	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-05
Date Analyzed:	03/19/25	Data File:	031910.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	116	50	150
Benz(a)anthracene-d12	99	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	<0.005
Anthracene	<0.005
Fluoranthene	0.0077
Pyrene	0.0079
Benz(a)anthracene	<0.005
Chrysene	0.0052
Benzo(b)fluoranthene	0.0050
Benzo(k)fluoranthene	<0.005
Benzo(a)pyrene	<0.005
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AGP-03-2	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-06
Date Analyzed:	03/19/25	Data File:	031913.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	117	50	150
Benz(a)anthracene-d12	105	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	<0.005
Anthracene	<0.005
Fluoranthene	<0.005
Pyrene	<0.005
Benz(a)anthracene	<0.005
Chrysene	0.011
Benzo(b)fluoranthene	0.0066
Benzo(k)fluoranthene	<0.005
Benzo(a)pyrene	<0.005
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	0.0099

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AGP-03-10	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-09
Date Analyzed:	03/19/25	Data File:	031914.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	121	50	150
Benz(a)anthracene-d12	103	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	<0.005
Anthracene	<0.005
Fluoranthene	<0.005
Pyrene	<0.005
Benz(a)anthracene	<0.005
Chrysene	<0.005
Benzo(b)fluoranthene	<0.005
Benzo(k)fluoranthene	<0.005
Benzo(a)pyrene	<0.005
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AGP-101-10	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-10
Date Analyzed:	03/19/25	Data File:	031915.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	115	50	150
Benz(a)anthracene-d12	108	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	0.0064
1-Methylnaphthalene	0.0062
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	0.035
Anthracene	<0.005
Fluoranthene	0.022
Pyrene	0.025
Benz(a)anthracene	0.0092
Chrysene	0.034
Benzo(b)fluoranthene	0.014
Benzo(k)fluoranthene	<0.005
Benzo(a)pyrene	0.011
Indeno(1,2,3-cd)pyrene	0.0071
Dibenz(a,h)anthracene	0.0056
Benzo(g,h,i)perylene	0.017

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AGP-03-12.5	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-11
Date Analyzed:	03/19/25	Data File:	031916.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	116	50	150
Benz(a)anthracene-d12	100	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	0.020
Anthracene	0.0053
Fluoranthene	0.020
Pyrene	0.024
Benz(a)anthracene	0.0060
Chrysene	0.011
Benzo(b)fluoranthene	0.0081
Benzo(k)fluoranthene	<0.005
Benzo(a)pyrene	0.0071
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	0.0059

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-02-2	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-12
Date Analyzed:	03/19/25	Data File:	031917.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	111	50	150
Benz(a)anthracene-d12	96	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	<0.005
Anthracene	<0.005
Fluoranthene	0.0064
Pyrene	0.0051
Benz(a)anthracene	<0.005
Chrysene	<0.005
Benzo(b)fluoranthene	<0.005
Benzo(k)fluoranthene	<0.005
Benzo(a)pyrene	<0.005
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-02-5	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-14
Date Analyzed:	03/19/25	Data File:	031918.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	103	50	150
Benz(a)anthracene-d12	89	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	0.010
Anthracene	<0.005
Fluoranthene	0.032
Pyrene	0.023
Benz(a)anthracene	0.014
Chrysene	0.018
Benzo(b)fluoranthene	0.020
Benzo(k)fluoranthene	0.0073
Benzo(a)pyrene	0.015
Indeno(1,2,3-cd)pyrene	0.012
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	0.017

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-02-13	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-15
Date Analyzed:	03/19/25	Data File:	031919.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	115	50	150
Benz(a)anthracene-d12	100	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	<0.005
Anthracene	<0.005
Fluoranthene	<0.005
Pyrene	<0.005
Benz(a)anthracene	<0.005
Chrysene	<0.005
Benzo(b)fluoranthene	<0.005
Benzo(k)fluoranthene	<0.005
Benzo(a)pyrene	<0.005
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-01-2.5	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-16
Date Analyzed:	03/19/25	Data File:	031920.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	112	50	150
Benz(a)anthracene-d12	95	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	<0.005
Anthracene	<0.005
Fluoranthene	<0.005
Pyrene	<0.005
Benz(a)anthracene	<0.005
Chrysene	<0.005
Benzo(b)fluoranthene	<0.005
Benzo(k)fluoranthene	<0.005
Benzo(a)pyrene	<0.005
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-01-10	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-18
Date Analyzed:	03/19/25	Data File:	031926.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	102	50	150
Benz(a)anthracene-d12	106	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	0.15
1-Methylnaphthalene	0.21
Acenaphthylene	<0.005
Acenaphthene	0.053
Fluorene	0.091
Phenanthrene	0.21
Anthracene	<0.005
Fluoranthene	0.031
Pyrene	0.076
Benz(a)anthracene	0.030
Chrysene	0.18
Benzo(b)fluoranthene	0.032
Benzo(k)fluoranthene	<0.005
Benzo(a)pyrene	0.022
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	0.037

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-01-13	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-20
Date Analyzed:	03/19/25	Data File:	031921.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	112	50	150
Benz(a)anthracene-d12	95	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	<0.005
Anthracene	<0.005
Fluoranthene	<0.005
Pyrene	<0.005
Benz(a)anthracene	<0.005
Chrysene	<0.005
Benzo(b)fluoranthene	<0.005
Benzo(k)fluoranthene	<0.005
Benzo(a)pyrene	<0.005
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-101-13	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-21
Date Analyzed:	03/19/25	Data File:	031922.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	119	50	150
Benz(a)anthracene-d12	99	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	0.0094
Anthracene	<0.005
Fluoranthene	<0.005
Pyrene	0.012
Benz(a)anthracene	<0.005
Chrysene	0.0062
Benzo(b)fluoranthene	<0.005
Benzo(k)fluoranthene	<0.005
Benzo(a)pyrene	<0.005
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AGP-02-1.5	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-22
Date Analyzed:	03/19/25	Data File:	031923.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	112	50	150
Benz(a)anthracene-d12	99	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	0.013
Anthracene	<0.005
Fluoranthene	0.016
Pyrene	0.014
Benz(a)anthracene	<0.005
Chrysene	0.018
Benzo(b)fluoranthene	0.012
Benzo(k)fluoranthene	<0.005
Benzo(a)pyrene	0.0071
Indeno(1,2,3-cd)pyrene	0.0098
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	0.013

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AGP-02-8	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-24
Date Analyzed:	03/19/25	Data File:	031924.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	113	50	150
Benz(a)anthracene-d12	92	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	<0.005
Anthracene	<0.005
Fluoranthene	<0.005
Pyrene	<0.005
Benz(a)anthracene	<0.005
Chrysene	<0.005
Benzo(b)fluoranthene	<0.005
Benzo(k)fluoranthene	<0.005
Benzo(a)pyrene	<0.005
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AGP-02-12.5	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-26
Date Analyzed:	03/19/25	Data File:	031925.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	113	50	150
Benz(a)anthracene-d12	90	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	<0.005
Anthracene	<0.005
Fluoranthene	<0.005
Pyrene	<0.005
Benz(a)anthracene	<0.005
Chrysene	<0.005
Benzo(b)fluoranthene	<0.005
Benzo(k)fluoranthene	<0.005
Benzo(a)pyrene	<0.005
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	<0.005

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	Method Blank	Client:	Aspect Consulting
Date Received:	Not Applicable	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	05-0711 mb
Date Analyzed:	03/19/25	Data File:	031909.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	120	50	150
Benz(a)anthracene-d12	95	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	<0.005
Anthracene	<0.005
Fluoranthene	<0.005
Pyrene	<0.005
Benz(a)anthracene	<0.005
Chrysene	<0.005
Benzo(b)fluoranthene	<0.005
Benzo(k)fluoranthene	<0.005
Benzo(a)pyrene	<0.005
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	<0.005

Analysis For Total Metals By EPA Method 6020B

Client Sample ID:	AGP-01-2	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-01
Date Analyzed:	03/19/25	Data File:	503287-01.223
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.4
Barium	59
Cadmium	<1
Chromium	11
Lead	8.3
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client Sample ID:	AGP-01-7.5	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-03
Date Analyzed:	03/24/25	Data File:	503287-03.061
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.9
Barium	44
Cadmium	<1
Chromium	10
Lead	28
Mercury	<1
Selenium	<1

Analysis For Total Metals By EPA Method 6020B

Client Sample ID:	AGP-01-7.5	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-03
Date Analyzed:	03/19/25	Data File:	503287-03.169
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client Sample ID:	AGP-01-12.5	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-05
Date Analyzed:	03/19/25	Data File:	503287-05.172
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.0
Barium	59
Cadmium	<1
Chromium	18
Lead	4.4
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client Sample ID:	AGP-03-2	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-06
Date Analyzed:	03/19/25	Data File:	503287-06.173
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.8
Barium	51
Cadmium	<1
Chromium	8.8
Lead	4.9
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client Sample ID:	AGP-03-10	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-09
Date Analyzed:	03/19/25	Data File:	503287-09.174
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.8
Barium	39
Cadmium	<1
Chromium	12
Lead	2.0
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client Sample ID:	AGP-101-10	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-10
Date Analyzed:	03/19/25	Data File:	503287-10.175
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.3
Barium	45
Cadmium	<1
Chromium	16
Lead	3.2
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client Sample ID:	AGP-03-12.5	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-11
Date Analyzed:	03/19/25	Data File:	503287-11.176
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.8
Barium	50
Cadmium	<1
Chromium	17
Lead	16
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client Sample ID:	AB-02-2	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-12
Date Analyzed:	03/19/25	Data File:	503287-12.177
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.5
Barium	61
Cadmium	<1
Chromium	21
Lead	16
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client Sample ID:	AB-02-5	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-14
Date Analyzed:	03/19/25	Data File:	503287-14.178
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.0
Barium	59
Cadmium	<1
Chromium	21
Lead	22
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client Sample ID:	AB-02-13	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-15
Date Analyzed:	03/19/25	Data File:	503287-15.179
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.1
Barium	27
Cadmium	<1
Chromium	8.5
Lead	1.8
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client Sample ID:	AB-01-2.5	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-16
Date Analyzed:	03/19/25	Data File:	503287-16.180
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.0
Barium	36
Cadmium	<1
Chromium	12
Lead	1.9
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client Sample ID:	AB-01-10	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-18
Date Analyzed:	03/19/25	Data File:	503287-18.181
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.7
Barium	57
Cadmium	<1
Chromium	35
Lead	4.5
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client Sample ID:	AB-01-13	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-20
Date Analyzed:	03/19/25	Data File:	503287-20.184
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.4
Barium	44
Cadmium	<1
Chromium	14
Lead	2.1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client Sample ID:	AB-101-13	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-21
Date Analyzed:	03/19/25	Data File:	503287-21.185
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.0
Barium	59
Cadmium	<1
Chromium	17
Lead	4.0
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client Sample ID:	AGP-02-1.5	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-22
Date Analyzed:	03/19/25	Data File:	503287-22.186
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.6
Barium	56
Cadmium	<1
Chromium	17
Lead	18
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client Sample ID:	AGP-02-8	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-24
Date Analyzed:	03/19/25	Data File:	503287-24.187
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.1
Barium	36
Cadmium	<1
Chromium	16
Lead	3.7
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client Sample ID:	AGP-02-12.5	Client:	Aspect Consulting
Date Received:	03/18/25	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	503287-26
Date Analyzed:	03/19/25	Data File:	503287-26.188
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.4
Barium	40
Cadmium	<1
Chromium	14
Lead	2.0
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client Sample ID:	Method Blank	Client:	Aspect Consulting
Date Received:	NA	Project:	Mercy Housing 35P AS220138
Date Extracted:	03/19/25	Lab ID:	I5-242 mb
Date Analyzed:	03/19/25	Data File:	I5-242 mb.108
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Date of Report: 03/26/25
Date Received: 03/18/25
Project: Mercy Housing 35P AS220138, F&BI 503287

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TPH AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code: 503287-01 (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)	40	85	70-130

Date of Report: 03/26/25
Date Received: 03/18/25
Project: Mercy Housing 35P AS220138, F&BI 503287

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 503287-01 (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	65	91	93	63-146	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	88	77-123

Date of Report: 03/26/25
Date Received: 03/18/25
Project: Mercy Housing 35P AS220138, F&BI 503287

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 503287-09 (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	<0.5	58	55	10-142	5
Chloromethane	mg/kg (ppm)	2	<0.5	65	61	10-126	6
Vinyl chloride	mg/kg (ppm)	2	<0.05	67	64	10-138	5
Bromomethane	mg/kg (ppm)	2	<0.5	95	91	10-163	4
Chloroethane	mg/kg (ppm)	2	<0.5	74	72	10-176	3
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	82	81	10-176	1
Acetone	mg/kg (ppm)	10	<5	101	90	10-163	12
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	89	76	10-160	16
Hexane	mg/kg (ppm)	2	<0.25	80	78	10-137	3
Methylene chloride	mg/kg (ppm)	2	<0.5	87	82	10-156	6
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	91	85	21-145	7
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	81	79	14-137	2
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	88	80	19-140	10
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	96	89	10-158	8
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	88	79	25-135	11
Chloroform	mg/kg (ppm)	2	<0.05	90	82	21-145	9
2-Butanone (MEK)	mg/kg (ppm)	10	<1	95	83	19-147	13
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	97	90	12-160	7
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	96	89	10-156	8
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	90	86	17-140	5
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	95	91	9-164	4
Benzene	mg/kg (ppm)	2	<0.03	89	83	29-129	7
Trichloroethene	mg/kg (ppm)	2	<0.02	92	88	21-139	4
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	82	72	30-135	13
Bromodichloromethane	mg/kg (ppm)	2	<0.05	92	86	23-155	7
Dibromomethane	mg/kg (ppm)	2	<0.05	89	82	23-145	8
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	90	80	24-155	12
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	91	81	28-144	12
Toluene	mg/kg (ppm)	2	<0.05	85	83	35-130	2
trans-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	90	85	26-149	6
1,1,2-Trichloroethane	mg/kg (ppm)	2	<0.05	84	80	10-205	5
2-Hexanone	mg/kg (ppm)	10	<1	87	81	15-166	7
1,3-Dichloropropane	mg/kg (ppm)	2	<0.05	81	81	31-137	0
Tetrachloroethene	mg/kg (ppm)	2	<0.025	89	89	20-133	0
Dibromochloromethane	mg/kg (ppm)	2	<0.05	86	84	28-150	2
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	85	80	28-142	6
Chlorobenzene	mg/kg (ppm)	2	<0.05	86	84	32-129	2
Ethylbenzene	mg/kg (ppm)	2	<0.05	88	86	32-137	2
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	93	88	31-143	6
m,p-Xylene	mg/kg (ppm)	4	<0.1	86	86	34-136	0
o-Xylene	mg/kg (ppm)	2	<0.05	85	86	33-134	1
Styrene	mg/kg (ppm)	2	<0.05	87	83	35-137	5
Isopropylbenzene	mg/kg (ppm)	2	<0.05	89	87	31-142	2
Bromoform	mg/kg (ppm)	2	<0.05	89	88	21-156	1
n-Propylbenzene	mg/kg (ppm)	2	<0.05	87	87	23-146	0
Bromobenzene	mg/kg (ppm)	2	<0.05	86	89	34-130	3
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	84	88	18-149	5
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	85	83	28-140	2
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	82	80	25-144	2
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	85	85	31-134	0
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	86	88	31-136	2
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	87	89	30-137	2
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	<0.05	89	90	10-182	1
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	85	87	23-145	2
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	89	91	21-149	2
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	87	88	30-131	1
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	86	84	29-129	2
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	88	90	31-132	2
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	81	84	11-161	4
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	92	94	22-142	2
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	91	94	10-142	3
Naphthalene	mg/kg (ppm)	2	<0.05	88	90	14-157	2
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	89	92	20-144	3

Date of Report: 03/26/25
Date Received: 03/18/25
Project: Mercy Housing 35P AS220138, F&BI 503287

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2	74	10-146
Chloromethane	mg/kg (ppm)	2	73	27-133
Vinyl chloride	mg/kg (ppm)	2	76	22-139
Bromomethane	mg/kg (ppm)	2	109	10-201
Chloroethane	mg/kg (ppm)	2	80	10-163
Trichlorofluoromethane	mg/kg (ppm)	2	97	10-196
Acetone	mg/kg (ppm)	10	110	52-141
1,1-Dichloroethene	mg/kg (ppm)	2	96	47-128
Hexane	mg/kg (ppm)	2	91	43-142
Methylene chloride	mg/kg (ppm)	2	96	10-184
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	100	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2	99	64-132
1,1-Dichloroethane	mg/kg (ppm)	2	97	64-135
2,2-Dichloropropane	mg/kg (ppm)	2	109	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2	96	64-135
Chloroform	mg/kg (ppm)	2	99	61-139
2-Butanone (MEK)	mg/kg (ppm)	10	105	30-197
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	110	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2	104	62-131
1,1-Dichloropropene	mg/kg (ppm)	2	100	64-136
Carbon tetrachloride	mg/kg (ppm)	2	107	60-139
Benzene	mg/kg (ppm)	2	98	65-136
Trichloroethene	mg/kg (ppm)	2	102	63-139
1,2-Dichloropropane	mg/kg (ppm)	2	89	61-145
Bromodichloromethane	mg/kg (ppm)	2	103	57-126
Dibromomethane	mg/kg (ppm)	2	97	62-123
4-Methyl-2-pentanone	mg/kg (ppm)	10	99	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2	98	65-143
Toluene	mg/kg (ppm)	2	95	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2	103	65-131
1,1,2-Trichloroethane	mg/kg (ppm)	2	97	62-131
2-Hexanone	mg/kg (ppm)	10	94	33-152
1,3-Dichloropropane	mg/kg (ppm)	2	93	67-128
Tetrachloroethene	mg/kg (ppm)	2	101	68-128
Dibromochloromethane	mg/kg (ppm)	2	97	55-121
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	96	66-129
Chlorobenzene	mg/kg (ppm)	2	97	67-128
Ethylbenzene	mg/kg (ppm)	2	102	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	103	64-121
m,p-Xylene	mg/kg (ppm)	4	99	68-128
o-Xylene	mg/kg (ppm)	2	100	67-129
Styrene	mg/kg (ppm)	2	100	67-129
Isopropylbenzene	mg/kg (ppm)	2	100	68-128
Bromoform	mg/kg (ppm)	2	101	56-132
n-Propylbenzene	mg/kg (ppm)	2	99	68-129
Bromobenzene	mg/kg (ppm)	2	98	69-128
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	99	69-129
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	98	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2	92	61-137
2-Chlorotoluene	mg/kg (ppm)	2	100	69-128
4-Chlorotoluene	mg/kg (ppm)	2	101	67-127
tert-Butylbenzene	mg/kg (ppm)	2	100	69-129
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	102	69-128
sec-Butylbenzene	mg/kg (ppm)	2	99	69-130
p-Isopropyltoluene	mg/kg (ppm)	2	104	69-130
1,3-Dichlorobenzene	mg/kg (ppm)	2	100	69-127
1,4-Dichlorobenzene	mg/kg (ppm)	2	99	68-126
1,2-Dichlorobenzene	mg/kg (ppm)	2	99	69-127
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	97	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	105	64-135
Hexachlorobutadiene	mg/kg (ppm)	2	103	50-153
Naphthalene	mg/kg (ppm)	2	101	62-128
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	104	61-126

Date of Report: 03/26/25
Date Received: 03/18/25
Project: Mercy Housing 35P AS220138, F&BI 503287

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270E SIM

Laboratory Code: 503287-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.5	<0.005	91	98	50-150	7
2-Methylnaphthalene	mg/kg (ppm)	0.5	<0.005	84	91	50-150	8
1-Methylnaphthalene	mg/kg (ppm)	0.5	<0.005	91	98	50-150	7
Acenaphthylene	mg/kg (ppm)	0.5	<0.005	88	90	50-150	2
Acenaphthene	mg/kg (ppm)	0.5	<0.005	99	101	50-150	2
Fluorene	mg/kg (ppm)	0.5	<0.005	91	92	50-150	1
Phenanthrene	mg/kg (ppm)	0.5	<0.005	99	96	50-150	3
Anthracene	mg/kg (ppm)	0.5	<0.005	99	99	50-150	0
Fluoranthene	mg/kg (ppm)	0.5	0.0067	101	98	50-150	3
Pyrene	mg/kg (ppm)	0.5	0.0069	92	92	23-169	0
Benz(a)anthracene	mg/kg (ppm)	0.5	<0.005	101	100	50-150	1
Chrysene	mg/kg (ppm)	0.5	0.0045	101	99	50-150	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.5	0.0044	84	82	10-187	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.5	<0.005	95	97	47-148	2
Benzo(a)pyrene	mg/kg (ppm)	0.5	<0.005	94	93	33-158	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.5	<0.005	111	112	50-150	1
Dibenz(a,h)anthracene	mg/kg (ppm)	0.5	<0.005	103	105	50-150	2
Benzo(g,h,i)perylene	mg/kg (ppm)	0.5	<0.005	115	114	41-147	1

Date of Report: 03/26/25
Date Received: 03/18/25
Project: Mercy Housing 35P AS220138, F&BI 503287

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270E SIM

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.5	93	64-124
2-Methylnaphthalene	mg/kg (ppm)	0.5	85	63-118
1-Methylnaphthalene	mg/kg (ppm)	0.5	93	62-122
Acenaphthylene	mg/kg (ppm)	0.5	90	68-119
Acenaphthene	mg/kg (ppm)	0.5	102	61-123
Fluorene	mg/kg (ppm)	0.5	95	68-115
Phenanthrene	mg/kg (ppm)	0.5	96	67-118
Anthracene	mg/kg (ppm)	0.5	103	70-130
Fluoranthene	mg/kg (ppm)	0.5	98	70-130
Pyrene	mg/kg (ppm)	0.5	90	70-130
Benz(a)anthracene	mg/kg (ppm)	0.5	100	67-122
Chrysene	mg/kg (ppm)	0.5	99	70-130
Benzo(b)fluoranthene	mg/kg (ppm)	0.5	88	70-130
Benzo(k)fluoranthene	mg/kg (ppm)	0.5	96	70-130
Benzo(a)pyrene	mg/kg (ppm)	0.5	91	62-113
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.5	106	65-130
Dibenz(a,h)anthracene	mg/kg (ppm)	0.5	103	61-133
Benzo(g,h,i)perylene	mg/kg (ppm)	0.5	114	62-127

Date of Report: 03/26/25
Date Received: 03/18/25
Project: Mercy Housing 35P AS220138, F&BI 503287

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 503287-01 (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	3.98	97 b	90 b	75-125	7 b
Barium	mg/kg (ppm)	50	52.8	82 b	96 b	75-125	16 b
Cadmium	mg/kg (ppm)	10	<1	106	99	75-125	7
Chromium	mg/kg (ppm)	50	10.1	84 b	79 b	75-125	6 b
Lead	mg/kg (ppm)	50	7.47	93	90	75-125	3
Mercury	mg/kg (ppm	5	<1	101	97	75-125	4
Selenium	mg/kg (ppm)	5	<1	81	74 vo	75-125	9
Silver	mg/kg (ppm)	10	<1	105	97	75-125	8

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	99	80-120
Barium	mg/kg (ppm)	50	102	80-120
Cadmium	mg/kg (ppm)	10	99	80-120
Chromium	mg/kg (ppm)	50	106	80-120
Lead	mg/kg (ppm)	50	98	80-120
Mercury	mg/kg (ppm)	5	104	80-120
Selenium	mg/kg (ppm)	5	96	80-120
Silver	mg/kg (ppm)	10	99	80-120

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, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. 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 between the method detection limit and the lowest calibration point. 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.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

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.

503287

SAMPLE CHAIN OF CUSTODY

03/18/25 VW1/~~VSC4~~/G4/N4

Report To Ali Cochrane + Hannah Cohen

Company Aspect Consulting

Address 710 2nd Ave, Suite #550

City, State, ZIP Seattle, WA

Phone _____ Email Ali.Cochrane + Hannah.Cohen @aspectconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: Mercy Housing

PO #: AS220135

REMARKS: X=per HC 03/19/25 ME

Project specific RLs? - Yes / No

INVOICE TO

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: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	RCRA Metals				Notes
AGP-01-2	01 A-E	03/17/25	1040	S	S	X	X			X	X		X				~~HOLD~~
AGP-01-5	02		1000														
AGP-01-7.5	03		1030			X	X			X	X		X				
AGP-01-10	04		1050														
AGP-01-12.5	05		1105			X	X			X	X		X				
AGP-03-2	06		1255			X	X			X	X		X				
AGP-03-5	07		1305														
AGP-03-7.5	08		1310														
AGP-03-10	09		1315			X	X			X	X		X				
AGP-101-10	10	↓	0815	↓	↓	X	X			X	X		X				↓

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Savour Epura	Aspect	03/18/25	1313
Received by:	Anh Phan	FDI	3/18/25	13:13
Relinquished by:		Samples received at 0 °C		
Received by:				

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

503287

SAMPLE CHAIN OF CUSTODY

03/18/25 VW1/~~VSG4~~/G4/N4

Page # 2 of 3

Report To Ali Cochrane + Hannah Cohen

Company Aspect Consulting

Address 710 2nd Ave, suite #550

City, State, ZIP Seattle, WA

Phone _____ Email Ali Cochrane + Hannah.Cohen @aspectconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: Mercy Housing 35p

PO #: AS220138

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	RCRA Metals				Notes ~~HOLD~~
AGP-03-12.5	11 A-E	03/17/25	1320	S	5	X	X			X		X	X				
AB-02-2	12		1430			X	X			X		X	X				
AB-02-10	13		1445														
AB-02-5	14		1440			X	X			X		X	X				
AB-02-13	15		1450			X	X			X		X	X				
AB-01-2.5	16	03/18/25	0900			X	X			X		X	X				
AB-01-5	17		0915														
AB-01-10	18		0930			X	X			X		X	X				
AB-01-7.5	19		0920														
AB-01-13	20		0935			X	X			X		X	X				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Favour Epuru	Aspect	03/18/25	1313
Received by:	Anh Phan	FBI	3/18/25	13:13
Relinquished by:		Samples received at 0 °C		
Received by:				

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

503287

SAMPLE CHAIN OF CUSTODY

03/18/25 ~~VSG4~~/VW1/G4/N4

Page # 3 of 3

Report To Ali Cochrane + Hannah Cohen

Company Aspect Consulting

Address 710 2nd Ave, Suite #550

City, State, ZIP Seattle, WA

Phone _____ Email Ali.cochrane + Hannah.cohen@aspectconsulting.com

SAMPLERS (*signature*)

PROJECT NAME: Mercy Housing 35P

PO #: AS220138

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	RCRA Metals				Notes
AB-101-13	21 A-E	03/18/25	1120	S	5	X	X			X	X		X				~~HOLD~~
AGP-02-1.5	22		1015			X	X			X	X		X				
AGP-02-5	23		1020														
AGP-02-8	24		1025			X	X			X	X		X				
AGP-02-10	25		1030														
AGP-02-12.5	26		1035			X	X			X	X		X				
Trip Blank	27 A-B	—	—	Water	2												Added at lab AP 3/18

ANALYSES REQUESTED

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Favour Epuna	Aspect	03/18/25	1313
Received by:	Anh Phan	FBI	3/18/25	13:13
Relinquished by:		Samples received at 0 °C		
Received by:				

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 503287 CLIENT Aspect INITIALS/ DATE: AP 03/18/25

If custody seals are present on cooler, are they intact? ☑ NA ☐ YES ☐ NO

Cooler/Sample temperature Ø °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☑ YES ☐ NO

How did samples arrive?
☑ Over the Counter ☐ Picked up by F&BI ☐ FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/ AP Date: 03/18/25
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory Ø-1 days

Are the samples clearly identified? (explain "no" answer below) ☐ YES ☑ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☑ YES ☐ NO

Were appropriate sample containers used? ☑ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☑ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☐ NA ☑ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?
(explain "no" answer below)

Sample ID's	☐ Yes ☑ No	Added Trip Blank at lab.	☐ Not on COC/label
Date Sampled*	☑ Yes ☐ No		☐ Not on COC/label
Time Sampled	☑ Yes ☐ No		☐ Not on COC/label
# of Containers	☑ Yes ☐ No		
Relinquished	☑ Yes ☐ No		
Requested analysis	☑ Yes ☐ On Hold		

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? ☑ NA ☐ YES ☐ NO

Number of unused TO15 canisters** _____ **Number of unused TO17 tubes** _____
**Fill out Green manifolds billing sheet

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

March 28, 2025

Ali Cochrane, Project Manager
Aspect Consulting
710 2nd Ave S, Suite 550
Seattle, WA 98104

Dear Ms Cochrane:

Included are the results from the testing of material submitted on March 21, 2025 from the Mercy Housing AS220138, F&BI 503333 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: Aspect Data, Hannah Cohen
ASP0328R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 21, 2025 by Friedman & Bruya, Inc. from the Aspect Consulting Mercy Housing AS220138, F&BI 503333 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Aspect Consulting
503333 -01	AMW-04-032025

All quality control requirements were acceptable.

Date of Report: 03/28/25
Date Received: 03/21/25
Project: Mercy Housing AS220138, F&BI 503333
Date Extracted: 03/24/25
Date Analyzed: 03/24/25

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
AMW-04-032025 503333-01	<100	78
Method Blank 05-649 MB	<100	75

Date of Report: 03/28/25
Date Received: 03/21/25
Project: Mercy Housing AS220138, F&BI 503333
Date Extracted: 03/21/25
Date Analyzed: 03/21/25

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
AMW-04-032025 503333-01	<50	<250	119
Method Blank 05-715 MB2	<50	<250	141

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	AMW-04-032025	Client:	Aspect Consulting
Date Received:	03/21/25	Project:	Mercy Housing AS220138
Date Extracted:	03/26/25	Lab ID:	503333-01
Date Analyzed:	03/26/25	Data File:	032615.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	78	126
Toluene-d8	99	84	115
4-Bromofluorobenzene	102	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<0.5
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<0.01
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.05	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	Method Blank	Client:	Aspect Consulting
Date Received:	Not Applicable	Project:	Mercy Housing AS220138
Date Extracted:	03/26/25	Lab ID:	05-0734 mb
Date Analyzed:	03/26/25	Data File:	032608.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	78	126
Toluene-d8	103	84	115
4-Bromofluorobenzene	100	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<0.5
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<0.01
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.05	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	AMW-04-032025	Client:	Aspect Consulting
Date Received:	03/21/25	Project:	Mercy Housing AS220138
Date Extracted:	03/24/25	Lab ID:	503333-01
Date Analyzed:	03/25/25	Data File:	032431.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	81	48	155

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	<0.02
Chrysene	<0.02
Benzo(a)pyrene	<0.02
Benzo(b)fluoranthene	<0.02
Benzo(k)fluoranthene	<0.02
Indeno(1,2,3-cd)pyrene	<0.02
Dibenz(a,h)anthracene	<0.02

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	Aspect Consulting
Date Received:	Not Applicable	Project:	Mercy Housing AS220138
Date Extracted:	03/24/25	Lab ID:	05-0730 mb
Date Analyzed:	03/25/25	Data File:	032429.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	85	48	155

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	<0.02
Chrysene	<0.02
Benzo(a)pyrene	<0.02
Benzo(b)fluoranthene	<0.02
Benzo(k)fluoranthene	<0.02
Indeno(1,2,3-cd)pyrene	<0.02
Dibenz(a,h)anthracene	<0.02

Date of Report: 03/28/25
Date Received: 03/21/25
Project: Mercy Housing AS220138, F&BI 503333

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TPH AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code: 503333-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	ug/L (ppb)	1,000	100	70-130

Date of Report: 03/28/25
Date Received: 03/21/25
Project: Mercy Housing AS220138, F&BI 503333

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	104	112	65-151	7

Date of Report: 03/28/25
Date Received: 03/21/25
Project: Mercy Housing AS220138, F&BI 503333

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 503333-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	10	<1	102	30-221
Chloromethane	ug/L (ppb)	10	<10	98	50-150
Vinyl chloride	ug/L (ppb)	10	<0.02	93	50-150
Bromomethane	ug/L (ppb)	10	<5	99	50-150
Chloroethane	ug/L (ppb)	10	<1	95	50-150
Trichlorofluoromethane	ug/L (ppb)	10	<1	91	50-150
Acetone	ug/L (ppb)	50	<50	54	18-161
1,1-Dichloroethene	ug/L (ppb)	10	<1	99	50-150
Hexane	ug/L (ppb)	10	<5	94	50-150
Methylene chloride	ug/L (ppb)	10	<5	73	50-150
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	<1	93	50-150
trans-1,2-Dichloroethene	ug/L (ppb)	10	<1	93	50-150
1,1-Dichloroethane	ug/L (ppb)	10	<1	98	50-150
2,2-Dichloropropane	ug/L (ppb)	10	<1	100	43-171
cis-1,2-Dichloroethene	ug/L (ppb)	10	<1	98	10-211
Chloroform	ug/L (ppb)	10	<1	92	50-150
2-Butanone (MEK)	ug/L (ppb)	50	<20	75	10-192
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	<0.2	98	50-150
1,1,1-Trichloroethane	ug/L (ppb)	10	<1	94	50-150
1,1-Dichloropropene	ug/L (ppb)	10	<1	91	50-150
Carbon tetrachloride	ug/L (ppb)	10	<0.5	93	50-150
Benzene	ug/L (ppb)	10	<0.35	99	50-150
Trichloroethene	ug/L (ppb)	10	<0.05	97	35-149
1,2-Dichloropropane	ug/L (ppb)	10	<1	90	50-150
Bromodichloromethane	ug/L (ppb)	10	<0.5	91	50-150
Dibromomethane	ug/L (ppb)	10	<1	95	50-150
4-Methyl-2-pentanone	ug/L (ppb)	50	<10	96	50-150
cis-1,3-Dichloropropene	ug/L (ppb)	10	<0.4	91	50-150
Toluene	ug/L (ppb)	10	<1	96	50-150
trans-1,3-Dichloropropene	ug/L (ppb)	10	<0.4	89	50-150
1,1,2-Trichloroethane	ug/L (ppb)	10	<0.5	94	50-150
2-Hexanone	ug/L (ppb)	50	<10	85	50-150
1,3-Dichloropropane	ug/L (ppb)	10	<1	93	50-150
Tetrachloroethene	ug/L (ppb)	10	<0.5	101	50-150
Dibromochloromethane	ug/L (ppb)	10	<0.5	87	50-150
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	<0.01	99	50-150
Chlorobenzene	ug/L (ppb)	10	<1	97	50-150
Ethylbenzene	ug/L (ppb)	10	<1	99	50-150
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	<1	96	50-150
m,p-Xylene	ug/L (ppb)	20	<2	97	50-150
o-Xylene	ug/L (ppb)	10	<1	97	50-150
Styrene	ug/L (ppb)	10	<1	94	50-150
Isopropylbenzene	ug/L (ppb)	10	<1	92	50-150
Bromoform	ug/L (ppb)	10	<5	92	50-150
n-Propylbenzene	ug/L (ppb)	10	<1	89	50-150
Bromobenzene	ug/L (ppb)	10	<1	89	50-150
1,3,5-Trimethylbenzene	ug/L (ppb)	10	<1	88	50-150
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	<0.2	100	50-150
1,2,3-Trichloropropane	ug/L (ppb)	10	<1	97	50-150
2-Chlorotoluene	ug/L (ppb)	10	<1	90	50-150
4-Chlorotoluene	ug/L (ppb)	10	<1	89	50-150
tert-Butylbenzene	ug/L (ppb)	10	<1	90	50-150
1,2,4-Trimethylbenzene	ug/L (ppb)	10	<1	89	50-150
sec-Butylbenzene	ug/L (ppb)	10	<1	89	50-150
p-Isopropyltoluene	ug/L (ppb)	10	<1	90	50-150
1,3-Dichlorobenzene	ug/L (ppb)	10	<1	92	50-150
1,4-Dichlorobenzene	ug/L (ppb)	10	<1	91	50-150
1,2-Dichlorobenzene	ug/L (ppb)	10	<1	90	50-150
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	<10	86	50-150
1,2,4-Trichlorobenzene	ug/L (ppb)	10	<1	83	50-150
Hexachlorobutadiene	ug/L (ppb)	10	<0.5	81	50-150
Naphthalene	ug/L (ppb)	10	<1	82	50-150
1,2,3-Trichlorobenzene	ug/L (ppb)	10	<1	83	50-150

Date of Report: 03/28/25
Date Received: 03/21/25
Project: Mercy Housing AS220138, F&BI 503333

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	10	100	104	46-206	4
Chloromethane	ug/L (ppb)	10	97	99	59-132	2
Vinyl chloride	ug/L (ppb)	10	93	98	64-142	5
Bromomethane	ug/L (ppb)	10	96	100	50-197	4
Chloroethane	ug/L (ppb)	10	93	97	70-130	4
Trichlorofluoromethane	ug/L (ppb)	10	93	95	51-159	2
Acetone	ug/L (ppb)	50	47	51	10-140	8
1,1-Dichloroethene	ug/L (ppb)	10	98	103	64-140	5
Hexane	ug/L (ppb)	10	94	96	54-136	2
Methylene chloride	ug/L (ppb)	10	91	96	43-134	5
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	91	95	70-130	4
trans-1,2-Dichloroethene	ug/L (ppb)	10	92	96	70-130	4
1,1-Dichloroethane	ug/L (ppb)	10	94	100	70-130	6
2,2-Dichloropropane	ug/L (ppb)	10	105	105	64-148	0
cis-1,2-Dichloroethene	ug/L (ppb)	10	96	100	70-130	4
Chloroform	ug/L (ppb)	10	92	96	70-130	4
2-Butanone (MEK)	ug/L (ppb)	50	67	73	47-112	9
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	95	99	70-130	4
1,1,1-Trichloroethane	ug/L (ppb)	10	92	96	70-130	4
1,1-Dichloropropene	ug/L (ppb)	10	90	97	70-130	7
Carbon tetrachloride	ug/L (ppb)	10	92	97	70-130	5
Benzene	ug/L (ppb)	10	97	101	70-130	4
Trichloroethene	ug/L (ppb)	10	92	98	70-130	6
1,2-Dichloropropane	ug/L (ppb)	10	89	91	70-130	2
Bromodichloromethane	ug/L (ppb)	10	89	93	70-130	4
Dibromomethane	ug/L (ppb)	10	93	98	70-130	5
4-Methyl-2-pentanone	ug/L (ppb)	50	87	89	68-130	2
cis-1,3-Dichloropropene	ug/L (ppb)	10	92	97	69-131	5
Toluene	ug/L (ppb)	10	96	104	70-130	8
trans-1,3-Dichloropropene	ug/L (ppb)	10	88	93	70-130	6
1,1,2-Trichloroethane	ug/L (ppb)	10	93	100	70-130	7
2-Hexanone	ug/L (ppb)	50	79	85	45-138	7
1,3-Dichloropropane	ug/L (ppb)	10	89	97	70-130	9
Tetrachloroethene	ug/L (ppb)	10	98	106	70-130	8
Dibromochloromethane	ug/L (ppb)	10	90	96	60-148	6
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	97	105	70-130	8
Chlorobenzene	ug/L (ppb)	10	98	103	70-130	5
Ethylbenzene	ug/L (ppb)	10	98	106	70-130	8
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	94	103	70-130	9
m,p-Xylene	ug/L (ppb)	20	97	105	70-130	8
o-Xylene	ug/L (ppb)	10	97	105	70-130	8
Styrene	ug/L (ppb)	10	92	99	70-130	7
Isopropylbenzene	ug/L (ppb)	10	91	100	70-130	9
Bromoform	ug/L (ppb)	10	87	95	69-138	9
n-Propylbenzene	ug/L (ppb)	10	91	101	70-130	10
Bromobenzene	ug/L (ppb)	10	89	100	70-130	12
1,3,5-Trimethylbenzene	ug/L (ppb)	10	90	102	70-130	12
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	98	110	70-130	12
1,2,3-Trichloropropane	ug/L (ppb)	10	95	107	70-130	12
2-Chlorotoluene	ug/L (ppb)	10	88	101	70-130	14
4-Chlorotoluene	ug/L (ppb)	10	87	102	70-130	16
tert-Butylbenzene	ug/L (ppb)	10	91	101	70-130	10
1,2,4-Trimethylbenzene	ug/L (ppb)	10	92	101	70-130	9
sec-Butylbenzene	ug/L (ppb)	10	89	101	70-130	13
p-Isopropyltoluene	ug/L (ppb)	10	91	103	70-130	12
1,3-Dichlorobenzene	ug/L (ppb)	10	91	103	70-130	12
1,4-Dichlorobenzene	ug/L (ppb)	10	92	105	70-130	13
1,2-Dichlorobenzene	ug/L (ppb)	10	89	102	70-130	14
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	86	99	70-130	14
1,2,4-Trichlorobenzene	ug/L (ppb)	10	83	90	70-130	8
Hexachlorobutadiene	ug/L (ppb)	10	83	93	70-130	11
Naphthalene	ug/L (ppb)	10	83	91	70-130	9
1,2,3-Trichlorobenzene	ug/L (ppb)	10	83	90	70-130	8

Date of Report: 03/28/25
Date Received: 03/21/25
Project: Mercy Housing AS220138, F&BI 503333

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270E

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benz(a)anthracene	ug/L (ppb)	10	97	94	66-131	3
Chrysene	ug/L (ppb)	10	91	89	66-129	2
Benzo(a)pyrene	ug/L (ppb)	10	94	92	66-129	2
Benzo(b)fluoranthene	ug/L (ppb)	10	92	89	55-144	3
Benzo(k)fluoranthene	ug/L (ppb)	10	96	94	58-139	2
Indeno(1,2,3-cd)pyrene	ug/L (ppb)	10	98	100	62-136	2
Dibenz(a,h)anthracene	ug/L (ppb)	10	103	104	55-146	1

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, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. 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 between the method detection limit and the lowest calibration point. 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.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

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.

503333

SAMPLE CHAIN OF CUSTODY

03/21/25 I2/VW1

Report To Ali Cochrane + Hannah Cohen
Company Aspect Consulting
Address 710 2nd Ave, Suite #550
City, State, ZIP Seattle, WA 98104
Phone 206-413-5407 Email Ali.Cochrane@aspectconsulting.com
Hannah.Cohen@aspectconsulting.com

SAMPLERS (*signature*) Emily Rusen
PROJECT NAME Mercy Housing
PO # AS220138
REMARKS
Project specific RLs? - Yes / No
INVOICE TO

Page # 1 of 1

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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260E	PAHs EPA 8270	PCBs EPA 8082	cPAHs EPA 8270E	NWTPH-Gx + Benzene by 8260E			Notes
AMW-04-032025	01A-H	3/20/25	1435	W	8	X				X			X	X			cPAHs only by 8270E Benzene by 8260E per HC/ME 03/21/25
						samples received at 3 °C											

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Emily Rusen	Emily Rusen	Aspect Consulting	3/21/25	0726
Received by: Nhan Phan	Nhan Phan	FeBI	3/21/25	0726
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 503333 CLIENT Aspect INITIALS/ DATE: (NP) 3/21/25

If custody seals are present on cooler, are they intact? ☑ NA ☐ YES ☐ NO

Cooler/Sample temperature 3 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☑ YES ☐ NO

How did samples arrive?
☑ Over the Counter ☐ Picked up by F&BI ☐ FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/ AP
*or other representative documents, letters, and/or shipping memos Date: 03/21/25

Number of days samples have been sitting prior to receipt at laboratory 1 days

Are the samples clearly identified? (explain "no" answer below) ☑ YES ☐ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☑ YES ☐ NO

Were appropriate sample containers used? ☑ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☑ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☐ NA ☑ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?
(explain "no" answer below)

Sample ID's	☑ Yes ☐ No	☐ Not on COC/label
Date Sampled*	☑ Yes ☐ No	☐ Not on COC/label
Time Sampled	☑ Yes ☐ No	☐ Not on COC/label
# of Containers	☑ Yes ☐ No	
Relinquished	☑ Yes ☐ No	
Requested analysis	☑ Yes ☐ On Hold	

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? ☑ NA ☐ YES ☐ NO

Number of unused TO15 canisters** _____ **Number of unused TO17 tubes** _____
**Fill out Green manifolds billing sheet

APPENDIX E

Terrestrial Ecological Evaluation Exclusion Form

Voluntary Cleanup Program

Washington State Department of Ecology
Toxics Cleanup Program

TERRESTRIAL ECOLOGICAL EVALUATION FORM

Under the Model Toxics Control Act (MTCA), a terrestrial ecological evaluation is necessary if hazardous substances are released into the soils at a Site. In the event of such a release, you must take one of the following three actions as part of your investigation and cleanup of the Site:

1. Document an exclusion from further evaluation using the criteria in WAC 173-340-7491.
2. Conduct a simplified evaluation as set forth in WAC 173-340-7492.
3. Conduct a site-specific evaluation as set forth in WAC 173-340-7493.

When requesting a written opinion under the Voluntary Cleanup Program (VCP), you must complete this form and submit it to the Department of Ecology (Ecology). The form documents the type and results of your evaluation.

Completion of this form is not sufficient to document your evaluation. You still need to document your analysis and the basis for your conclusion in your cleanup plan or report.

If you have questions about how to conduct a terrestrial ecological evaluation, please contact the Ecology site manager assigned to your Site. For additional guidance, please refer to https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Terrestrial-ecological-evaluation.

Step 1: IDENTIFY HAZARDOUS WASTE SITE	
Please identify below the hazardous waste site for which you are documenting an evaluation.	
Facility/Site Name: 35P Tacoma Affordable Housing Development	
Facility/Site Address: 3561 Pacific Ave, Tacoma, Washington 98418	
Facility/Site No: Not yet assigned	VCP Project No.: Not yet assigned

Step 2: IDENTIFY EVALUATOR			
Please identify below the person who conducted the evaluation and their contact information.			
Name: Hannah Cohen			Title: Geologist
Organization: Aspect Consulting			
Mailing address: 801 5th Ave, Suite 2200			
City: Seattle		State: WA	Zip code: 98104
Phone: 206-512-9091	Fax:	E-mail: Hannah.cohen@aspectconsulting.com	

Step 3: DOCUMENT EVALUATION TYPE AND RESULTS

A. Exclusion from further evaluation.

1. Does the Site qualify for an exclusion from further evaluation?

☒ Yes *If you answered **"YES,"** then answer **Question 2**.*

☐ No or Unknown *If you answered **"NO" or "UNKNOWN,"** then skip to **Step 3B** of this form.*

2. What is the basis for the exclusion? *Check all that apply. Then skip to **Step 4** of this form.*

Point of Compliance: WAC 173-340-7491(1)(a)

☐ All soil contamination is, or will be,* at least 15 feet below the surface.

☒ All soil contamination is, or will be,* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination.

Barriers to Exposure: WAC 173-340-7491(1)(b)

☒ All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.

Undeveloped Land: WAC 173-340-7491(1)(c)

☐ There is less than 0.25 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site and any of the following chemicals is present: chlorinated dioxins or furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, heptachlor epoxide, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, or pentachlorobenzene.

☐ For sites not containing any of the chemicals mentioned above, there is less than 1.5 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site.

Background Concentrations: WAC 173-340-7491(1)(d)

☐ Concentrations of hazardous substances in soil do not exceed natural background levels as described in WAC 173-340-200 and 173-340-709.

* An exclusion based on future land use must have a completion date for future development that is acceptable to Ecology.

[±] "Undeveloped land" is land that is not covered by building, roads, paved areas, or other barriers that would prevent wildlife from feeding on plants, earthworms, insects, or other food in or on the soil.

[#] "Contiguous" undeveloped land is an area of undeveloped land that is not divided into smaller areas of highways, extensive paving, or similar structures that are likely to reduce the potential use of the overall area by wildlife.

B. Simplified evaluation.

1. Does the Site qualify for a simplified evaluation?

☐ Yes *If you answered **"YES,"** then answer **Question 2** below.*

☐ No or Unknown *If you answered **"NO"** or **"UNKNOWN,"** then skip to **Step 3C** of this form.*

2. Did you conduct a simplified evaluation?

☐ Yes *If you answered **"YES,"** then answer **Question 3** below.*

☐ No *If you answered **"NO,"** then skip to **Step 3C** of this form.*

3. Was further evaluation necessary?

☐ Yes *If you answered **"YES,"** then answer **Question 4** below.*

☐ No *If you answered **"NO,"** then answer **Question 5** below.*

4. If further evaluation was necessary, what did you do?

☐ Used the concentrations listed in Table 749-2 as cleanup levels. *If so, then skip to **Step 4** of this form.*

☐ Conducted a site-specific evaluation. *If so, then skip to **Step 3C** of this form.*

5. If no further evaluation was necessary, what was the reason? *Check all that apply. Then skip to **Step 4** of this form.*

Exposure Analysis: WAC 173-340-7492(2)(a)

☐ Area of soil contamination at the Site is not more than 350 square feet.

☐ Current or planned land use makes wildlife exposure unlikely. Used Table 749-1.

Pathway Analysis: WAC 173-340-7492(2)(b)

☐ No potential exposure pathways from soil contamination to ecological receptors.

Contaminant Analysis: WAC 173-340-7492(2)(c)

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations that exceed the values listed in Table 749-2.

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations that exceed the values listed in Table 749-2, and institutional controls are used to manage remaining contamination.

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays.

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays, and institutional controls are used to manage remaining contamination.

C. Site-specific evaluation. A site-specific evaluation process consists of two parts: (1) formulating the problem, and (2) selecting the methods for addressing the identified problem. Both steps require consultation with and approval by Ecology. *See* WAC 173-340-7493(1)(c).

1. Was there a problem? *See* WAC 173-340-7493(2).

☐ Yes *If you answered **"YES,"** then answer **Question 2** below.*

☐ No *If you answered **"NO,"** then identify the reason here and then skip to **Question 5** below:*

- ☐ No issues were identified during the problem formulation step.
- ☐ While issues were identified, those issues were addressed by the cleanup actions for protecting human health.

2. What did you do to resolve the problem? *See* WAC 173-340-7493(3).

- ☐ Used the concentrations listed in Table 749-3 as cleanup levels. *If so, then skip to **Question 5** below.*
- ☐ Used one or more of the methods listed in WAC 173-340-7493(3) to evaluate and address the identified problem. *If so, then answer **Questions 3 and 4** below.*

3. If you conducted further site-specific evaluations, what methods did you use?
Check all that apply. See WAC 173-340-7493(3).

- ☐ Literature surveys.
- ☐ Soil bioassays.
- ☐ Wildlife exposure model.
- ☐ Biomarkers.
- ☐ Site-specific field studies.
- ☐ Weight of evidence.
- ☐ Other methods approved by Ecology. If so, please specify:

4. What was the result of those evaluations?

- ☐ Confirmed there was no problem.
- ☐ Confirmed there was a problem and established site-specific cleanup levels.

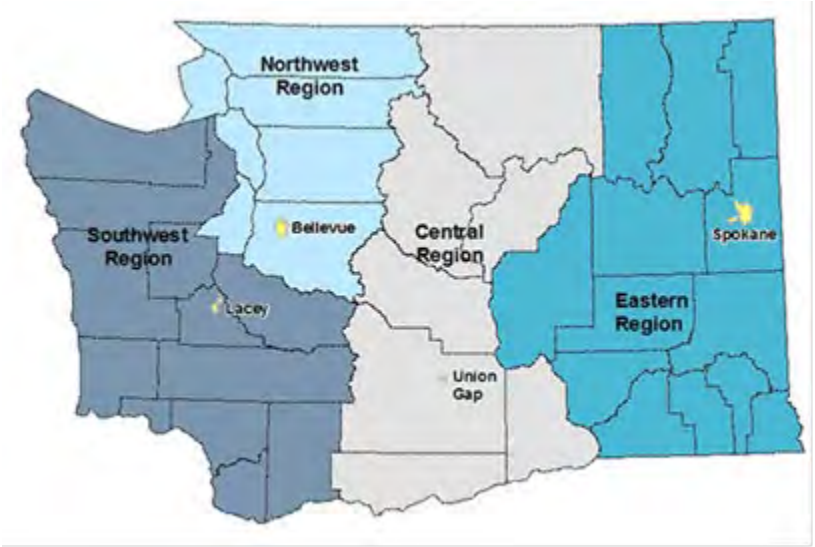
5. Have you already obtained Ecology's approval of both your problem formulation and problem resolution steps?

☐ Yes If so, please identify the Ecology staff who approved those steps:

☐ No

Step 4: SUBMITTAL

Please mail your completed form to the Ecology site manager assigned to your Site. If a site manager has not yet been assigned, please mail your completed form to the Ecology regional office for the County in which your Site is located.



Northwest Region: Attn: VCP Coordinator 3190 160th Ave. SE Bellevue, WA 98008-5452	**Central Region:** Attn: VCP Coordinator 1250 West Alder St. Union Gap, WA 98903-0009
Southwest Region: Attn: VCP Coordinator P.O. Box 47775 Olympia, WA 98504-7775	**Eastern Region:** Attn: VCP Coordinator N. 4601 Monroe Spokane WA 99205-1295

If you need this publication in an alternate format, please call the Toxics Cleanup Program at 360-407-7170. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call 877-833-6341.

APPENDIX F

Report Limitations and Guidelines for Use

REPORT LIMITATIONS AND USE GUIDELINES

Reliance Conditions for Third Parties

This report was prepared for the exclusive use of the Client. No other party may rely on this report or the product of our services without the express written consent of Aspect Consulting (Aspect). This limitation is to provide our firm with reasonable protection against liability claims by third parties with whom there would otherwise be no contractual conditions or limitations and guidelines governing their use of the report. Within the limitations of scope, schedule and budget, our services have been executed in accordance with our Agreement with the Client and recognized standards of professionals in the same locality and involving similar conditions.

Services for Specific Purposes, Persons and Projects

Aspect has performed the services in general accordance with the scope and limitations of our Agreement. This report has been prepared for the exclusive use of the Client and their authorized third parties, approved in writing by Aspect. This report is not intended for use by others, and the information contained herein is not applicable to other properties.

This report is not, and should not, be construed as a warranty or guarantee regarding the presence or absence of hazardous substances or petroleum products that may affect the subject property. The report is not intended to make any representation concerning title or ownership to the subject property. If real property records were reviewed, they were reviewed for the sole purpose of determining the subject property's historical uses. All findings, conclusions, and recommendations stated in this report are based on the data and information provided to Aspect, current use of the subject property, and observations and conditions that existed on the date and time of the report.

Aspect structures its services to meet the specific needs of our clients. Because each environmental study is unique, each environmental report is unique, prepared solely for the specific client and subject property. This report should not be applied for any purpose or project except the purpose described in the Agreement.

This Report Is Project-Specific

Aspect considered a number of unique, project-specific factors when establishing the Scope of Work for this project and report. You should not rely on this report if it was:

- Not prepared for you
- Not prepared for the specific purpose identified in the Agreement
- Not prepared for the specific real property assessed
- Completed before important changes occurred concerning the subject property, project or governmental regulatory actions

If changes are made to the project or subject property after the date of this report, Aspect should be retained to assess the impact of the changes with respect to the conclusions contained in the report.

Geoscience Interpretations

The geoscience practices (geotechnical engineering, geology, and environmental science) require interpretation of spatial information that can make them less exact than other engineering and natural science disciplines. It is important to recognize this limitation in evaluating the content of the report. If you are unclear how these "Report Limitations and Use Guidelines" apply to your project or site, you should contact Aspect.

Discipline-Specific Reports Are Not Interchangeable

The equipment, techniques and personnel used to perform an environmental study differ significantly from those used to perform a geotechnical or geologic study and vice versa. For that reason, a geotechnical engineering or geologic report does not usually address any environmental findings, conclusions or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. Similarly, environmental reports are not used to address geotechnical or geologic concerns regarding the subject property.

Environmental Regulations Are Not Static

Some hazardous substances or petroleum products may be present near the subject property in quantities or under conditions that may have led, or may lead, to contamination of the subject property, but are not included in current local, state or federal regulatory definitions of hazardous substances or petroleum products or do not otherwise present potential liability. Changes may occur in the standards for appropriate inquiry or regulatory definitions of hazardous substance and petroleum products; therefore, this report has a limited useful life.

Property Conditions Change Over Time

This report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time (for example, Phase I ESA reports are applicable for 180 days), by events such as a change in property use or occupancy, or by natural events, such as floods, earthquakes, slope failure or groundwater fluctuations. If more than six months have passed since issuance of our report, or if any of the described events may have occurred following the issuance of the report, you should contact Aspect so that we may evaluate whether changed conditions affect the continued reliability or applicability of our conclusions and recommendations.

Phase I ESAs – Uncertainty Remains After Completion

Aspect has performed the services in general accordance with the scope and limitations of our Agreement and the current version of the “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process”, ASTM E1527, and U.S. Environmental Protection Agency (EPA)'s Federal Standard 40 CFR Part 312 "Innocent Landowners, Standards for Conducting All Appropriate Inquiries".

No ESA can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with subject property. Performance of an ESA study is intended to reduce, but not eliminate, uncertainty regarding the potential for environmental conditions affecting the subject property. There is always a potential that areas with contamination that were not identified during this ESA exist at the subject property or in the study area. Further evaluation of such potential would require additional research, subsurface exploration, sampling and/or testing.

Historical Information Provided by Others

Aspect has relied upon information provided by others in our description of historical conditions and in our review of regulatory databases and files. The available data does not provide definitive information with regard to all past uses, operations or incidents affecting the subject property or adjacent properties. Aspect makes no warranties or guarantees regarding the accuracy or completeness of information provided or compiled by others.

Exclusion of Mold, Fungus, Radon, Lead, and HBM

Aspect’s services do not include the investigation, detection, prevention or assessment of the presence of molds, fungi, spores, bacteria, and viruses, and/or any of their byproducts. Accordingly, this report does not include any interpretations, recommendations, findings, or conclusions regarding the detection, assessment, prevention or abatement of molds, fungi, spores, bacteria, and viruses, and/or any of their byproducts. Aspect’s services also do not include the investigation or assessment of hazardous building materials (HBM) such as asbestos, polychlorinated biphenyls (PCBs) in light ballasts, lead based paint, asbestos-containing building materials, urea-formaldehyde insulation in on-site structures or debris or any other HBMs. Aspect’s services do not include an evaluation of radon or lead in drinking water, unless specifically requested.