



Remedial Action Report Petroleum-Contaminated Soils

**212 South 3rd Street
Renton, Washington**

Prepared For:

**Washington Federal
425 Pike Street
Seattle, WA, 98101**

January 30, 2015

Project Number: 90001

Prepared By:

Kane Environmental, Inc.
3815 Woodland Park Avenue North, Suite 102
Seattle, Washington 98103

A handwritten signature in blue ink, appearing to read "Vance Atkins", written over a horizontal line.

Vance Atkins
Senior Hydrogeologist

A handwritten signature in blue ink, appearing to read "John R. Kane", written over a horizontal line.

John R. Kane
Principal

EXECUTIVE SUMMARY

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EXECUTIVE SUMMARY

This *Remedial Action Report* for the property located at 212 South 3rd Street (the Property) in Renton, Washington is presented by Kane Environmental, Inc. The Property is composed of one tax parcel (000720-0115) and is located at the northwest corner of the intersection of South 3rd Street and Shattuck Avenue South in Renton, Washington (Figure 1). The Property is bounded by commercial development to the north and west; to the east by Shattuck Avenue South, with commercial development beyond; and to the south by South 3rd Street, with commercial development beyond.

A heating oil underground storage tank (UST) was removed from the Property in 2007. A release of petroleum hydrocarbons to soil and perched groundwater was discovered at that time, and subsequent soil remedial actions took place at the Property in 2007. Due to the proximity of the Property building, a quantity of petroleum-contaminated soil in exceedance of Washington Department of Ecology Model Toxics Control Act (MTCA) Method A cleanup levels was left in-place at the Property. Groundwater monitoring took place at the Property in 2007 and 2008. The Property received a Restrictive Covenant from the Washington Department of Ecology due to the remnant soils left in-place. Kane Environmental conducted additional Phase II investigations at the Property in 2013 and 2014 to assess the extent of those soils. The soils were determined to be limited to a volume of approximately ten cubic yards in the area between the former remedial excavation and the foundation of the Property building.

The purpose of this report is to describe the Remedial Action (RA) performed at the Property in application for the removal of the restrictive covenant on the Property. The RA consisted of the following task:

- Removal of contaminated soils at the location above. Soils were excavated beyond perched groundwater. Lateral excavation was completed adjacent to and below the depth of the foundation floor of the Property building. Soils were transported and disposed of at a licensed facility.

The remedial action described in this report was conducted in accordance with the Model Toxics Control Act (MTCA) and the MTCA Cleanup Regulations (WAC 173-340), and is substantially equivalent to a Washington Department of Ecology conducted cleanup action.

1.0 INTRODUCTION

Kane Environmental, Inc. (Kane Environmental) is pleased to provide this *Remedial Action Report* documenting the petroleum contaminated soil excavation at 212 South 3rd Street (the Property) in Seattle, Washington (Figure 1). This RA report describes the soil removal conducted on the Property.

The purpose of this report is to describe the Remedial Action (RA) in application for the removal of the restrictive covenant on the Property. The RA consisted of the following tasks:

- Excavating and removing from the Property all soils determined to be contaminated with total petroleum hydrocarbon (TPH) during prior subsurface investigations.

1.1 Site Background and Historic Property Use

The Property is composed of one tax parcel (000720-0115) and is located at the northwest corner of the intersection of South 3rd Street and Shattuck Avenue South in Renton, Washington (Figure 1). The Property is bounded by commercial development to the north and west; to the east by Shattuck Avenue South, with commercial development beyond; and to the south by South 3rd Street, with commercial development beyond.

Langseth Environmental of Tacoma, Washington removed a 675-gallon heating oil underground storage tank (UST) from the Property in 2007. A release of petroleum hydrocarbons to soil and perched groundwater was discovered at that time. The Riley Group of Bothell, Washington conducted a subsurface investigation and Remedial Feasibility and Independent Cleanup Plan (2007a,b). They completed a subsequent soil remedial action at the Property in 2007 (Riley, 2007c). Due to the proximity of the Property building, a quantity of petroleum-contaminated soil in exceedance of Washington Department of Ecology Model Toxics Control Act (MTCA) Method A cleanup levels was left in-place at the Property. Groundwater monitoring took place at the Property in 2007 and 2008. The Property received a Restrictive Covenant from the Washington Department of Ecology due to the remnant soils left in-place. Kane Environmental conducted additional Phase II investigations at the Property in 2013 and 2014 to assess the extent of those soils (Kane Environmental, 2013, 2014). The soils were determined to be limited to a volume of approximately ten cubic yards in the area between the former remedial excavation and the foundation of the Property building.

2.0 SUBSURFACE CONDITIONS

2.1 Geologic Setting

The Renton, Washington is located in the Puget Sound Basin, where the majority of geological and land features were formed during the Pleistocene Epoch which began approximately 1.5 million years ago. Soils in the vicinity of the Property generally consist of a combination of artificial fill and alluvial soils deposited by the Cedar River. The fill typically consists of re-graded alluvial soils and is locally observed to be silt or silty clay with occasional sandy lenses. The local alluvial soils are a combination of clayey silt and fine sand deposited as flood terrace deposits (Mullineaux, D.R., 1965).

Soils encountered during the prior subsurface investigations and the Remedial Action generally consisted of light brown and gray silty fill. The silt became gray below depths of eight feet below ground surface (bgs).

2.2 Hydrogeologic Setting

The U.S. Geological Survey (USGS) Renton, Washington 7.5-Minute Quadrangle Topographic Map, indicates the Property is approximately 30 feet above mean sea level (msl) and that the ground surface of the Property is generally flat. During drilling and excavation activities, perched groundwater was encountered at depths between approximately eight to ten feet bgs.

3.0 SAMPLING METHODOLOGY

3.1 Health and Safety Briefing

A health and safety briefing was conducted prior to the start of all onsite activities. Potential contaminants, hazardous activities and preventive measures were discussed. All field personnel from Kane Environmental and the soil excavation contractor were present during the briefings.

3.2 Sample Collection Methods

Soil hand-grab samples were collected from the excavation by placing soil directly into laboratory-supplied jars from the excavator bucket where excavations exceeded four feet bgs and safe access was not possible, according to the State of Washington Industrial Safety and Health Act (WISHA) standards. Soil samples collected for VOC analyses were sampled in accordance with EPA 50535A protocols.

The soil samples collected during the Remedial Action were individually labeled and immediately placed into ice-filled coolers and Fremont Analytical (Fremont) in Seattle, Washington under standard chain-of-custody procedures.

3.3 Field Screening Methods

Following collection, samples were inspected for any indication of contamination by means of olfactory inspection (odor) and visual inspection (discoloration/sheen).

3.4 Analytical Methods

Selected soil and groundwater samples were analyzed for:

- Total petroleum hydrocarbons (TPH) – diesel and heavy oil range by NWTPH-Dx/Dx Extended;
- Total Lead by EPA Method 6010

All samples were analyzed in accordance with the laboratory's in-house Quality Assurance/Quality Control Plan. Sample analyses were performed in compliance with the EPA analytical methods and Ecology guidelines. All samples were analyzed within specified holding times. All sample detection limits were within method requirements, and no factors appeared to adversely affect data result quality. Analytical data reports are presented in the Attachment A and analytical results are tabulated in Table 1.

4.0 SOIL REMEDIATION

4.1 Former Heating Oil UST

On January 15 and 17, Kane Remediation Technologies, Inc. and Dougg Pettapiece of Pacific Northwest Excavation (PNWE) excavated remnant contaminated soils located between the former heating oil UST location and Property building. Clean backfill soils were excavated and temporarily stockpiled on site. Soil segregation was based on prior soil analytical results and field screening. During excavation, a 4-inch sewer line and grease trap were removed to access petroleum-contaminated soils.

Petroleum-contaminated soils were excavated for off-site disposal. The soil excavation extended east-west consistent with the prior UST remedial soil excavation. The soil was removed by excavating two four-foot-wide 'cells' exposing the Property building foundation. After removal of the soils, the excavation was sampled and backfilled with controlled-density fill (CDF) to provide support to the remnant soils and building foundation. After the CDF had cured, the remaining central 'cell' of petroleum-contaminated soil was removed. Soils were excavated to 12 to 13 feet bgs, below observed perched groundwater seepage. The excavation vertical and horizontal extent was based on prior soil boring results and field screening at the time of excavation. The soil excavation removed soils associated with two soil samples exceeding MTCA cleanup levels (Riley, 2007) left in place at the base of the former UST excavation. Photographs of the excavation are included as Attachment B.

Kane Environmental collected four post-excavation soil samples from the excavation sidewall and base (Figure 2). Petroleum hydrocarbons were not detected at laboratory reporting limits in any of the soil samples (Table 1). Laboratory analytical reports are included as Attachment A.

Approximately 24.49 tons were excavated and transported off-site at Allied Waste's Seattle transfer station for final disposal at the Roosevelt Regional landfill. Soil disposal documentation is included as Attachment C.

4.2 Soil Disposal

A total of approximately 24.49 tons of TPH impacted soil was removed from the Property and transferred to Allied Waste's Seattle transfer station for final disposal at the Roosevelt Regional landfill. Disposal documentation is included as Attachment C.

4.3 Excavation Backfill and Site Restoration

As discussed above, the excavated area was backfilled with CDF to an elevation of the previous approximate ground surface. The excavated area surface was restored with gravel backfill and surfaces with asphalt.

5.0 CONCLUSIONS

Based on the results of the analytical data for the excavation clearance samples, remnant petroleum-contaminated soil exceeding MTCA Method A cleanup levels in the vicinity of the former heating oil UST at the Property has been removed. Petroleum concentrations in post-excavation samples associated with this remedial action are below laboratory reporting limits. Other soils in the vicinity of the former heating oil UST have been documented to contain petroleum hydrocarbons below laboratory reporting limits or below MTCA Cleanup Levels. Based on the results of the Remedial Action, there are no remaining impacts to human health and the environment.

Based on the analytical data results, we request that the environmental covenant be removed from the Property. The removal of the covenant will allow Washington Federal to move forward with the sale of the foreclosed property for redevelopment, creating jobs for the Renton area.

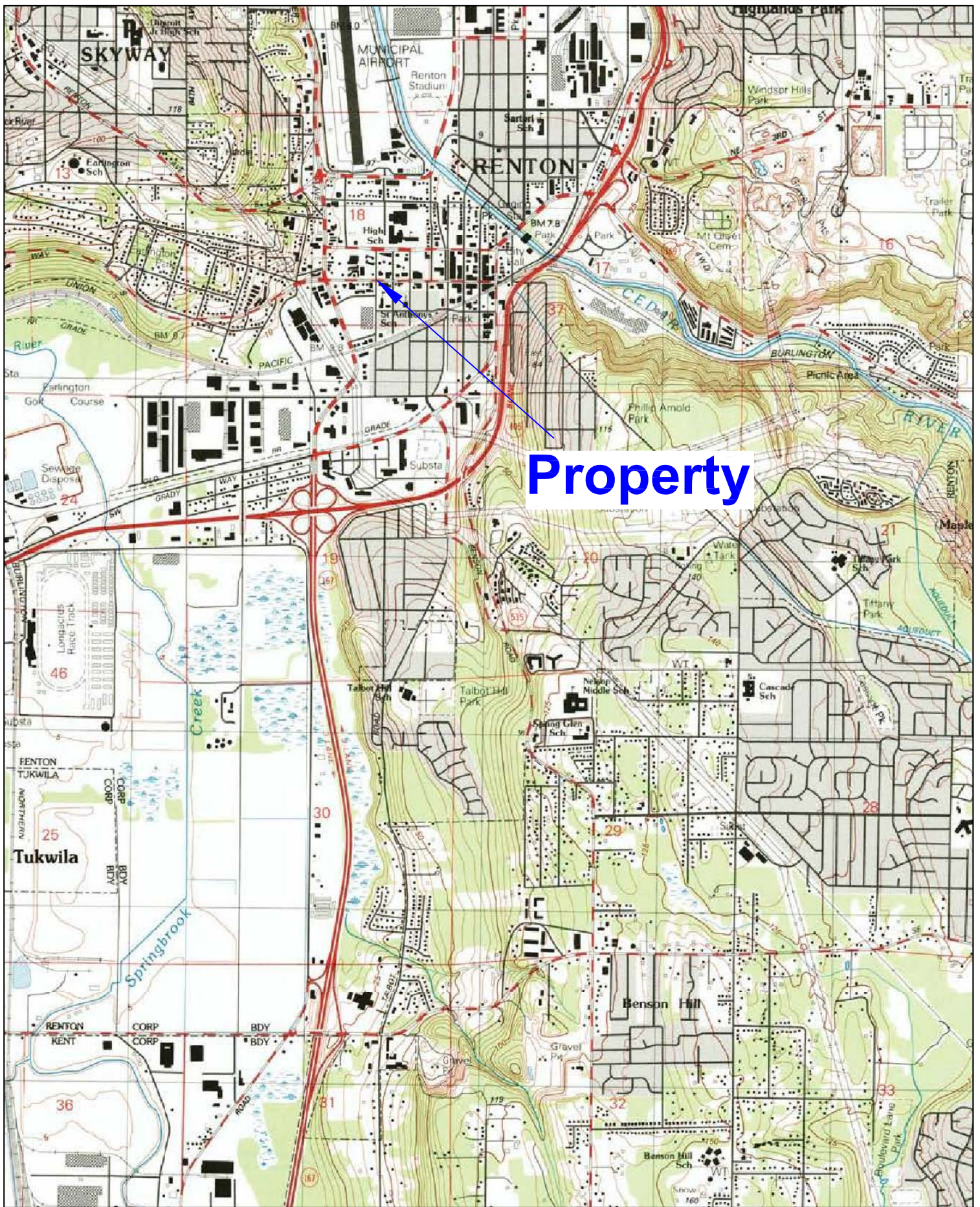
This remedial action described in this report was conducted in accordance with MTCA and the MTCA Cleanup Regulations (WAC 173-340), and is substantially equivalent to a Washington Department of Ecology conducted cleanup action.

6.0 LIMITATIONS AND EXCEPTIONS

Kane Environmental has performed this work in general accordance with generally accepted professional practices using the standard of the industry today, for the nature and conditions of the work completed in the same locality and at the same time as the work was performed, and with the terms and conditions as set forth in our proposal.

Kane Environmental shall not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time the report was prepared. Facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time the work was performed. This Remedial Action does not include other services not specifically described in the scope of work in Section 1.0 of this report. Conclusions were made within the operative constraints of the scope of work, budget, and schedule for this project.

Figures



Remedial Action
212 S 3rd Street
Renton, Washington
Project 90001

Figure 1
Vicinity Map



0 10 20
Approximate Scale in Feet



LEGEND

- KSB-1 Approximate locations of Kane Environmental soil borings (2014)
- KSB-10 Approximate locations of Kane Environmental soil borings with groundwater diesel concentrations above MTCA Method A Cleanup Level (2014)
- PEX-1 Approximate location of remedial excavation soil sample
- (dashed) Approximate extents of 2015 remedial excavation
- (dashed) Approximate location of RGI remedial excavation
- (red) Approximate former location of UST
- (orange) RGI confirmation samples with TPH as diesel detected above MTCA Method A cleanup level in soil (removed 01/15)
- (hatched) Approximate location of grease trap (removed 01/15)
- (dashed) Approximate location of side sewer line



Remedial Action
212 S 3rd Street
Renton, Washington
Project 90001

Figure 2
Site Plan and Soil Sampling Locations

Tables

Table 1
Soil Analytical Results
212 S 3rd Street
Renton, Washington
Kane Project # 90001

<i>Sample ID</i>	<i>Sample Date</i>	<i>Sample Depth, ft bgs</i>	<i>Diesel</i>	<i>Heavy Oil</i>	<i>Lead</i>
			<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>
Former Heating Oil UST Location					
<i>Remedial Activities</i>					
PEX-1-12	1/13/2015	12	nd	nd	5.3
PEX-2-10	1/13/2015	10	nd	nd	
PEX-3-14	1/13/2015	14	nd	nd	
PEX-4-10	1/15/2015	10	nd	nd	
MTCA Method A or B Cleanup Level			2000	2000	250

Notes:

MTCA Method A or B Cleanup Level - Washington Dept. of Ecology MTCA Method A / B soil cleanup levels, Chapter 173-340 WAC

mg/kg = milligrams per kilogram [equivalent to parts per million (ppm)]

nd- Not Detected at laboratory reporting limit

Blank - not analyzed

Attachment A
Remedial Excavation Analytical Laboratory
Reports



3600 Fremont Ave. N.

Seattle, WA 98103

T: (206) 352-3790

F: (206) 352-7178

info@fremontanalytical.com

Kane Environmental, Inc.

Vance Atkins

3815 Woodland Park Ave N, Ste. 102

Seattle, WA 98103

RE: 212 S. 3rd

Lab ID: 1501091

January 14, 2015

Attention Vance Atkins:

Fremont Analytical, Inc. received 3 sample(s) on 1/13/2015 for the analyses presented in the following report.

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample Moisture (Percent Moisture)

Total Metals by EPA Method 6020

This report consists of the following:

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

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

Thank you for using Fremont Analytical.

Sincerely,

A handwritten signature in black ink, appearing to read "Chelsea Ward", written in a cursive style.

Chelsea Ward
Project Manager



Date: 01/29/2015

CLIENT: Kane Environmental, Inc.
Project: 212 S. 3rd
Lab Order: 1501091

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1501091-001	PEX-1-12	01/13/2015 10:14 AM	01/13/2015 2:40 PM
1501091-002	PEX-2-10	01/13/2015 10:45 AM	01/13/2015 2:40 PM
1501091-003	PEX-3-14	01/13/2015 10:50 AM	01/13/2015 2:40 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

CLIENT: Kane Environmental, Inc.**Project:** 212 S. 3rd

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.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1501091-001A) required Silica Gel Cleanup Procedure (Using Method No 3630C).

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1501091-002A) required Silica Gel Cleanup Procedure (Using Method No 3630C).

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1501091-003A) required Silica Gel Cleanup Procedure (Using Method No 3630C).



Analytical Report

WO#: 1501091
Date Reported: 1/14/2015

CLIENT: Kane Environmental, Inc.
Project: 212 S. 3rd

Lab ID: 1501091-001 **Collection Date:** 1/13/2015 10:14:00 AM
Client Sample ID: PEX-1-12 **Matrix:** Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.</u>					Batch ID: 9786	Analyst: EC
Diesel (Fuel Oil)	ND	27.6		mg/Kg-dry	1	1/13/2015 9:08:00 PM
Heavy Oil	ND	69.0		mg/Kg-dry	1	1/13/2015 9:08:00 PM
Surr: 2-Fluorobiphenyl	111	50-150		%REC	1	1/13/2015 9:08:00 PM
Surr: o-Terphenyl	109	50-150		%REC	1	1/13/2015 9:08:00 PM
<u>Total Metals by EPA Method 6020</u>					Batch ID: 9787	Analyst: TN
Lead	5.30	0.233		mg/Kg-dry	1	1/13/2015 7:17:41 PM
<u>Sample Moisture (Percent Moisture)</u>					Batch ID: R19074	Analyst: CG
Percent Moisture	30.9			wt%	1	1/13/2015 4:14:00 PM

Lab ID: 1501091-002 **Collection Date:** 1/13/2015 10:45:00 AM
Client Sample ID: PEX-2-10 **Matrix:** Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.</u>					Batch ID: 9786	Analyst: EC
Diesel (Fuel Oil)	ND	29.5		mg/Kg-dry	1	1/13/2015 9:39:00 PM
Heavy Oil	ND	73.6		mg/Kg-dry	1	1/13/2015 9:39:00 PM
Surr: 2-Fluorobiphenyl	109	50-150		%REC	1	1/13/2015 9:39:00 PM
Surr: o-Terphenyl	106	50-150		%REC	1	1/13/2015 9:39:00 PM
<u>Sample Moisture (Percent Moisture)</u>					Batch ID: R19074	Analyst: CG
Percent Moisture	32.8			wt%	1	1/13/2015 4:14:00 PM

Qualifiers:

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
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Analytical Report

WO#: 1501091

Date Reported: 1/14/2015

CLIENT: Kane Environmental, Inc.

Project: 212 S. 3rd

Lab ID: 1501091-003

Client Sample ID: PEX-3-14

Collection Date: 1/13/2015 10:50:00 AM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.</u>						Batch ID: 9786 Analyst: EC
Diesel (Fuel Oil)	ND	26.9		mg/Kg-dry	1	1/13/2015 10:10:00 PM
Heavy Oil	ND	67.4		mg/Kg-dry	1	1/13/2015 10:10:00 PM
Surr: 2-Fluorobiphenyl	108	50-150		%REC	1	1/13/2015 10:10:00 PM
Surr: o-Terphenyl	105	50-150		%REC	1	1/13/2015 10:10:00 PM

<u>Sample Moisture (Percent Moisture)</u>						Batch ID: R19074 Analyst: CG
Percent Moisture	31.9			wt%	1	1/13/2015 4:14:00 PM

Qualifiers:	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
	J Analyte detected below quantitation limits	ND Not detected at the Reporting Limit
	RL Reporting Limit	S Spike recovery outside accepted recovery limits



Date: 1/14/2015

Work Order: 1501091
CLIENT: Kane Environmental, Inc.
Project: 212 S. 3rd

QC SUMMARY REPORT
Total Metals by EPA Method 6020

Sample ID: MB-9787	SampType: MBLK	Units: mg/Kg	Prep Date: 1/13/2015	RunNo: 19076							
Client ID: MBLKS	Batch ID: 9787		Analysis Date: 1/13/2015	SeqNo: 380276							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead ND 0.200

Sample ID: LCS-9787	SampType: LCS	Units: mg/Kg	Prep Date: 1/13/2015	RunNo: 19076							
Client ID: LCSS	Batch ID: 9787		Analysis Date: 1/13/2015	SeqNo: 380277							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead 175 0.200 189.0 0 92.4 74.6 125.4

Sample ID: 1501087-001ADUP	SampType: DUP	Units: mg/Kg-dry	Prep Date: 1/13/2015	RunNo: 19076							
Client ID: BATCH	Batch ID: 9787		Analysis Date: 1/13/2015	SeqNo: 380279							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead 2.27 0.179 2.173 4.58 20

Sample ID: 1501087-001AMS	SampType: MS	Units: mg/Kg-dry	Prep Date: 1/13/2015	RunNo: 19076							
Client ID: BATCH	Batch ID: 9787		Analysis Date: 1/13/2015	SeqNo: 380281							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead 24.0 0.179 22.38 2.173 97.5 75 125

Sample ID: 1501087-001AMSD	SampType: MSD	Units: mg/Kg-dry	Prep Date: 1/13/2015	RunNo: 19076							
Client ID: BATCH	Batch ID: 9787		Analysis Date: 1/13/2015	SeqNo: 380282							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead 24.9 0.180 22.56 2.173 101 75 125 24.00 3.70 20

Qualifiers: 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
 J Analyte detected below quantitation limits
 ND Not detected at the Reporting Limit
 R RPD outside accepted recovery limits
 RL Reporting Limit
 S Spike recovery outside accepted recovery limits

Work Order: 1501091
CLIENT: Kane Environmental, Inc.
Project: 212 S. 3rd

QC SUMMARY REPORT
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID: 1501087-001ADUP	SampType: DUP	Units: mg/Kg-dry				Prep Date: 1/13/2015	RunNo: 19078				
Client ID: BATCH	Batch ID: 9786					Analysis Date: 1/13/2015	SeqNo: 380327				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	ND	20.8						0		30	
Heavy Oil	ND	51.9						0		30	
Surr: 2-Fluorobiphenyl	22.4		20.78		108	50	150		0		
Surr: o-Terphenyl	21.8		20.78		105	50	150		0		

Sample ID: LCS-9786	SampType: LCS	Units: mg/Kg				Prep Date: 1/13/2015	RunNo: 19078				
Client ID: LCSS	Batch ID: 9786					Analysis Date: 1/13/2015	SeqNo: 380347				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	533	20.0	500.0	0	107	65	135				
Surr: 2-Fluorobiphenyl	22.3		20.00		112	50	150				
Surr: o-Terphenyl	20.6		20.00		103	50	150				

Sample ID: MB-9786	SampType: MBLK	Units: mg/Kg				Prep Date: 1/13/2015	RunNo: 19078				
Client ID: MBLKS	Batch ID: 9786					Analysis Date: 1/13/2015	SeqNo: 380348				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	ND	20.0									
Heavy Oil	ND	50.0									
Surr: 2-Fluorobiphenyl	20.6		20.00		103	50	150				
Surr: o-Terphenyl	19.9		20.00		99.6	50	150				

Qualifiers:

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Client Name: **KANE**
 Logged by: **Kerra Ziegler**

 Work Order Number: **1501091**
 Date Received: **1/13/2015 2:40:03 PM**

Chain of Custody

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

Log In

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

Special Handling (if applicable)

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

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:
 1/14/15 and 1/29/15: Sample ID corrections per client request

Item Information

Item #	Temp °C	Condition
Sample	13.7	



Fremont Analytical

3600 Fremont Ave N.
Seattle, WA 98103

Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record

Laboratory Project No (Internal): 1501091

Page: 1 of: 1

Project Name: 212 S. 3RD

Location: Arms

Collected by: Arms

Project No: 90001

Date: 1/13/15

Project Name:

Location:

Collected by:

Email:

Tel:

Fax:

Reports To (PM): Arms

*Matrix Codes: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SI = Solid, W = Water, DW = Drinking Water, GW = Ground Water, WW = Waste Water

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOC (PA 8260)	GX/RTX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCD)	SMA VOC (PA 8270)	PCB (PA 8270)	Metals** (620 / 200 B)	Total T1 Dissolved (D)	Anions (C)*** (8011)	Comments/Depth
1 Pex-1-2	1/13/15	1014								X				
2 Pex-2-10	1/13/15	1045												
3 Pex-3-14	1/13/15	1050												
4														
5														
6														
7														
8														
9														
10														

**Metals Analysis (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Pd Se Sr Sm Ti U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Special Remarks: SILICA GEL

Sample Disposal: Return to Client Disposal by Lab (A fee may be assessed if samples are retained after 90 days.)

Relinquished: Ch O Date/Time: 1/13/15 14:40

Received: [Signature] Date/Time: 1/13/15 14:40

Relinquished: [Signature] Date/Time: 1/13/15 14:40

TAT -> Same Day* Next Day* Day 3 Day STD

*Please coordinate with the lab in advance



3600 Fremont Ave. N.

Seattle, WA 98103

T: (206) 352-3790

F: (206) 352-7178

info@fremontanalytical.com

Kane Environmental, Inc.

Vance Atkins

3815 Woodland Park Ave N, Ste. 102

Seattle, WA 98103

RE: 212 S 3rd

Lab ID: 1501118

January 16, 2015

Attention Vance Atkins:

Fremont Analytical, Inc. received 1 sample(s) on 1/15/2015 for the analyses presented in the following report.

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample Moisture (Percent Moisture)

This report consists of the following:

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

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

Thank you for using Fremont Analytical.

Sincerely,

A handwritten signature in black ink, appearing to read "Chelsea Ward", written in a cursive style.

Chelsea Ward
Project Manager



Date: 01/16/2015

CLIENT: Kane Environmental, Inc.
Project: 212 S 3rd
Lab Order: 1501118

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1501118-001	PEX-4-10	01/15/2015 9:00 AM	01/15/2015 2:45 PM



Case Narrative

WO#: 1501118

Date: 1/16/2015

CLIENT: Kane Environmental, Inc.

Project: 212 S 3rd

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.

Prep Comments for METHOD (PREP-DX-S), SAMPLE (1501118-001A) required Silica Gel Cleanup Procedure (Using Method No 3630C).



Analytical Report

WO#: 1501118
Date Reported: 1/16/2015

Client: Kane Environmental, Inc.

Collection Date: 1/15/2015 9:00:00 AM

Project: 212 S 3rd

Lab ID: 1501118-001

Matrix: Soil

Client Sample ID: PEX-4-10

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Batch ID: 9818

Analyst: EC

Diesel (Fuel Oil)	ND	20.8		mg/Kg-dry	1	1/16/2015 2:43:00 PM
Heavy Oil	ND	52.0		mg/Kg-dry	1	1/16/2015 2:43:00 PM
Surr: 2-Fluorobiphenyl	109	50-150		%REC	1	1/16/2015 2:43:00 PM
Surr: o-Terphenyl	109	50-150		%REC	1	1/16/2015 2:43:00 PM

Sample Moisture (Percent Moisture)

Batch ID: R19128

Analyst: SB

Percent Moisture	19.3			wt%	1	1/15/2015 5:08:32 PM
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Qualifiers:

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
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 1/16/2015

Work Order: 1501118
CLIENT: Kane Environmental, Inc.
Project: 212 S 3rd

QC SUMMARY REPORT
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID 1501116-001ADUP	SampType: DUP	Units: mg/Kg-dry				Prep Date: 1/15/2015	RunNo: 19136				
Client ID: BATCH	Batch ID: 9818					Analysis Date: 1/16/2015	SeqNo: 381501				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	19.9						0		30	
Heavy Oil	ND	49.7						0		30	
Surr: 2-Fluorobiphenyl	22.3		19.87		112	50	150		0		
Surr: o-Terphenyl	21.5		19.87		108	50	150		0		

Sample ID LCS-9818	SampType: LCS	Units: mg/Kg				Prep Date: 1/15/2015	RunNo: 19136				
Client ID: LCSS	Batch ID: 9818					Analysis Date: 1/16/2015	SeqNo: 381508				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	552	20.0	500.0	0	110	65	135				
Surr: 2-Fluorobiphenyl	24.4		20.00		122	50	150				
Surr: o-Terphenyl	22.6		20.00		113	50	150				

Sample ID MB-9818	SampType: MBLK	Units: mg/Kg				Prep Date: 1/15/2015	RunNo: 19136				
Client ID: MBLKS	Batch ID: 9818					Analysis Date: 1/16/2015	SeqNo: 381509				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	20.0									
Heavy Oil	ND	50.0									
Surr: 2-Fluorobiphenyl	22.6		20.00		113	50	150				
Surr: o-Terphenyl	21.9		20.00		110	50	150				

Qualifiers:

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	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Sample Log-In Check List

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

Work Order Number: **1501118**
 Date Received: **1/15/2015 2:45:00 PM**

Chain of Custody

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

Log In

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

Special Handling (if applicable)

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

Person Notified:	<input type="text"/>	Date	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:

Item Information

Item #	Temp °C	Condition
Sample	18.3	



Fremont Analytical

Chain of Custody Record

3600 Fremont Ave N.
Seattle, WA 98103

Tel: 206-352-3790
Fax: 206-352-7178

Date: 1/15/15

Laboratory Project No (Internal): 1501118
Page: 1 of 1

Client: KAUS

Project Name: 212 S 7th

Address:

Location: Stevens

City, State, Zip:

Collected by: Stevens
Project No: 90031

Reports To (PM): Atrens

Fax: _____ Email: _____

*Matrix Codes: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, WW = Waste Water

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOC (EPA 8260)	GY/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SEMI-VOL (EPA 8270)	PAH (EPA 8270 - SIM)	PCBs (EPA 8082)	Metals** (6020 / 200.8)	Total (T) / Dissolved (D)	Anions (K)***	FOB (8011)	Comments/Depth
1	Per-H-10	1/6/15	903														Surf 6m
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

**Metals Analysis (Circle): MTCA-5 RCM-8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Se Sr Sn Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Sample Disposal: Return to Client Disposal by Lab (a fee may be assessed if samples are retained after 30 days.)

Relinquished: [Signature] Date/Time: 1/15/15 14:45
 Relinquished: [Signature] Date/Time: 1/15/15 14:45
 Received: [Signature] Date/Time: 1/15/15 14:45
 Retained: [Signature] Date/Time: 1/15/15 14:45

TAT -> SameDay NextDay 2 Day 3 Day STD
 *Please coordinate with the lab in advance

Attachment B
Site Photographs

Remedial Action

Project: 90001

Site Address: 212 South 3rd Street, Renton WA



Photographs 1&2 – Area of remedial excavation prior to asphalt removal. Approximate planned extent of excavation marked on pavement. Utility cover protects 4-inch monitoring/dewatering well installed by Riley (2007).



Photograph 3 – Removal of asphalt and grease trap. Grease trap/sewer piping visible by building foundation.

Remedial Action

Project: 90001

Site Address: 212 South 3rd Street, Renton WA



Photograph 4 – Beginning excavation at east 'cell.' Surficial soils and 2007 backfill removed and segregated. 4-inch PVC well casing visible to left of photograph.



Photograph 5 – East and west 'cells' after soil removal, with remnant center cell in place, January 13, 2015.

Remedial Action

Project: 90001

Site Address: 212 South 3rd Street, Renton WA



Photograph 6 – East and west 'cells' backfilled with CDF to stabilize excavation, January 13, 2015.



Photograph 7 – Backfilling central 'cell' after completion of remedial excavation on January 15, 2015.

Remedial Action

Project: 90001

Site Address: 212 South 3rd Street, Renton WA



Photograph 8 – Surfacial backfill and sewer line replacement, January 16, 2015



Photograph 9 – Surfacial backfill brought to grade and prepared for asphalt surfacing. 4-inch well location marked with cone. Well monument subsequently replaced prior to asphalt paving.

Attachment C
Soil Disposal Documentation

SITE REGIONAL DISPOSAL INTERMODAL
3rd and lander
Seattle, WA --

CUSTOMER
333336
Kane Environmental Inc
3815 Woodland Park Ave N
Seattle, WA 98103,
LW-15006

SITE 01	TICKET # 917966	CELL
WEIGHMASTER IN - JAMIE B. OUT - Drinda L.		
DATE/TIME IN 01-15-2015 12:22 pm		DATE/TIME OUT 01-15-2015 12:36 pm
VEHICLE SOIL		CONTAINER
REFERENCE A-123 PNW EXCAVATING INVOICE		
BILL OF LADING		

SCALE IN	GROSS WEIGHT	50,920	NET TONS	12.75	
SCALE OUT	TARE WEIGHT	25,420	NET WEIGHT	25,500	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
12.75	TN	SW-CONT SOIL W/FUEL RENTON/KING				



NET AMOUNT
TENDERED
CHANGE
CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (07/12)

SIGNATURE _____

SITE REGIONAL DISPOSAL INTERMODAL
3rd and lander
Seattle, WA --

CUSTOMER
333336
Kane Environmental Inc
3815 Woodland Park Ave N
Seattle, WA 98103
LW-15006

SITE 01	TICKET # 918011	CELL
WEIGHMASTER IN - Drinda L. OUT - JAMIE B.		
DATE/TIME IN 01-16-2015 8:50 am		DATE/TIME OUT 01-16-2015 8:58 am
VEHICLE SOIL		CONTAINER
REFERENCE PACIFIC NW INVOICE		
BILL OF LADING		

SCALE IN	GROSS WEIGHT	48,880	NET TONS	11.74	
SCALE OUT	TARE WEIGHT	25,400	NET WEIGHT	23,480	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
11.74	TN	SW-CONT SOIL W/FUEL RENTON/KING				



NET AMOUNT
TENDERED
CHANGE
CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (07/12)

2/21

SIGNATURE _____