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AUG 15 2012

WA State Department
of Ecology (SWRO)

August 8, 2012

Guy Barrett, LHG
Southwest Regional Office,
Toxics Cleanup Program
P.O. Box 47775, Olympia, WA 98504-7775

RE: *Confirmation Soil Sampling at Former PP-9-9' (WSDOT Investigation)*

FOR: Former L&C Deli / Vista Mart
Ecology Facility ID's 1035 and 7176
13908 and 13912 NE 20th Avenue; Vancouver, WA 98686

Dear Mr. Barrett:

The purpose of this letter is to document confirmation soil sampling activities conducted at the former L&C Deli site (i.e., subject property), located at 13908 and 13912 NE 20th Avenue, in Vancouver, Washington.

Background

In March 2011, an on-site investigation of the subject property was conducted on behalf of the Washington Department of Transportation (WSDOT). As part of this investigation three (3) borings were advanced on the subject property a short distance north, south and east of the underground storage tank (UST) cavity; five (5) were advanced further south, east, and northeast on the portion of the subject property to be purchased by WSDOT, and two (2) were advanced within the adjacent right-of-ways to the east and south. Total petroleum hydrocarbons (TPH) in the lube oil or heavy oil range were detected in on-site boring P9, and in borings P1, P5 and P10 on the proposed WSDOT purchase property. Heavy oil-range TPH was detected at 405 milligrams per kilogram (mg/kg), or parts per million (ppm), in soil from on-site boring P9, collected at a depth of nine (9) feet below land surface (BLS).

In a letter dated July 3, 2012, Mr. Guy Barrett identified the detected heavy oil concentration of 405 ppm as exceeding the 1991 Model Toxics Control Act (MTCA) cleanup level of 200 ppm. Based

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on these findings, Mr. Barrett offered the following three (3) potential options to address the residual lube oil contamination:

- Collect soil samples at this location at the same depth and location as PP-9-9 to see if MTCA cleanup levels are still being exceeded for lube oil.
- Excavate the soil at this location and take confirmation soil samples to demonstrate that the soil is in compliance with MTCA.
- Record an environmental covenant to protect human health on the property.

Due to concerns about an environmental covenant hindering a future sale of the property, this option was not considered. With thoughts that the detected heavy oil TPH (i.e., lube oil) may actually be organic in nature, and the result of biogenic interference, re-sampling was selected as the best option over excavation. This letter report documents those re-sampling activities.

Soil Confirmation Sampling and Analytical Results

Methodology

On July 25th, the former location of PP-9 was identified by a small circular asphalt patch. Borings P13 and P14 were advanced on either side of PP-9, within approximately 12 to 16 inches, using a GeoProbe® 6600 truck and tooling equipment. The site location map, site plan and boring locations are shown on figures provided in **Attachment A**.

Both push-probe borings were advanced to an approximate depth of 10 feet below land surface (BLS). No soil was collected between the surface and a depth of six (6) feet BLS. At each boring, a solid point was pushed to a depth of six (6) feet BLS, and then a hollow, stainless-steel core barrel was pushed to a depth of 10 feet BLS. The inside of the leading core barrel was lined with polyethylene sleeves. The leading core barrel retrieves a core of subsurface materials within the polyethylene sleeves with minimal disturbance. Soil materials collected in the liners were inspected in the field for visual and olfactory evidence of contamination, as well as screened with an Organic Vapor Meter with Photoionization detector (OVM-PID). Observations, measurements, and other field notes for borings P13 and P14 are provided in **Attachment B**.

From borings P13 and P14, soil samples were collected at a depth of nine (9) feet BLS. Soil samples were transferred from the polyethylene sleeves to clean laboratory-supplied sample glassware using new disposable latex/vinyl gloves. Each soil sample was given a unique identification, logged onto a formal chain-of-custody record, placed on synthetic ice in a cooler, and delivered to laboratory facility for analysis. Both soil samples were submitted to Test America Laboratories in Beaverton, Oregon, for analysis of diesel-range and heavy oil-range TPH per Northwest Method NWTPH-Dx.

Upon completion of groundwater sampling, the temporary well casings were removed, and the borings backfilled with bentonite to seal the borehole. An asphalt patch was used to complete the boring to match surrounding asphalt surface.

Observations and Soil Analytical Results

As previously noted, no soil was collected between the surface and a depth of six (6) feet BLS. In each of the borings (i.e., P13 and P14), soil between six (6) and 10 feet BLS were noted to consist of a light brown and grey mottled silt. No visual or olfactory evidence of petroleum was noted in these soils. Additionally, no organic vapors were noted in soils using an OVM-PID. In each of the borings, soil samples were collected at a depth of nine (9) feet BLS. Both soil samples were analyzed for diesel-range and heavy oil-range TPH per Northwest Method NWTPH-Dx. The analytical results did not detect either diesel-range TPH or heavy oil-range TPH in either soil sample (P13-9' or P14-9'). The complete laboratory report is provided in **Attachment C**.

Results Discussion

The site is located in a low-lying area. According to the owner, the property was developed by adding fill to a low lying drainage area frequently noted to contain shallow surface water. Based on observations during UST decommissioning activities, and excavation of petroleum-contaminated soil near the former USTs, the site appears to be underlain by highly organic silty-clayey soils. Highly organic soils with high carbon content can often produce false positives of heavy oil-range TPH (i.e., lube oil). It is suspected that the low-level lube oil TPH concentrations identified by the laboratory during the WSDOT investigation are the result of organic biogenic interference.

It is also important to note that heavy oil-range TPH was not detected in confirmation soil sampling from the limits of the UST excavation (see **Figure 3** in **Attachment A**). As such, it seems that the detected concentration of 405 ppm lube oil was an anomaly, and not actually the results of oil contamination.

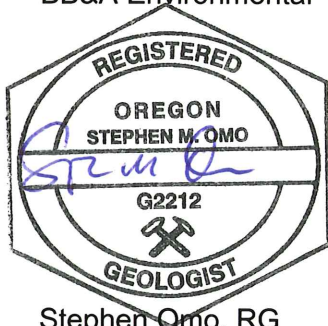
Summary

Based on these findings of this report, and the results of previous investigations and confirmation soil sampling conducted at the subject property, no contaminants in soil have been detected at concentrations exceeding the 1991 MTCA Cleanup values or the 2001 MTCA Method A Cleanup values. Based on these findings, BB&A requests that a no further action (NFA) determination be issued for the former L&C Deli / Vista Mart site, without any further periodic review.

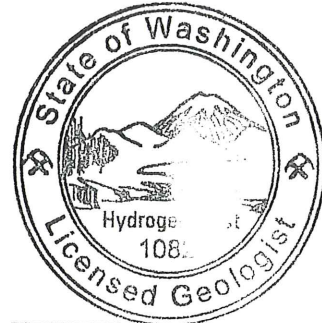
Mr. Guy Barrett
Page 4

Should you have any questions regarding this update letter, please do not hesitate to contact us.

Sincerely,
BB&A Environmental



Stephen Omo, RG
Project Manager



Randall Jon Boese

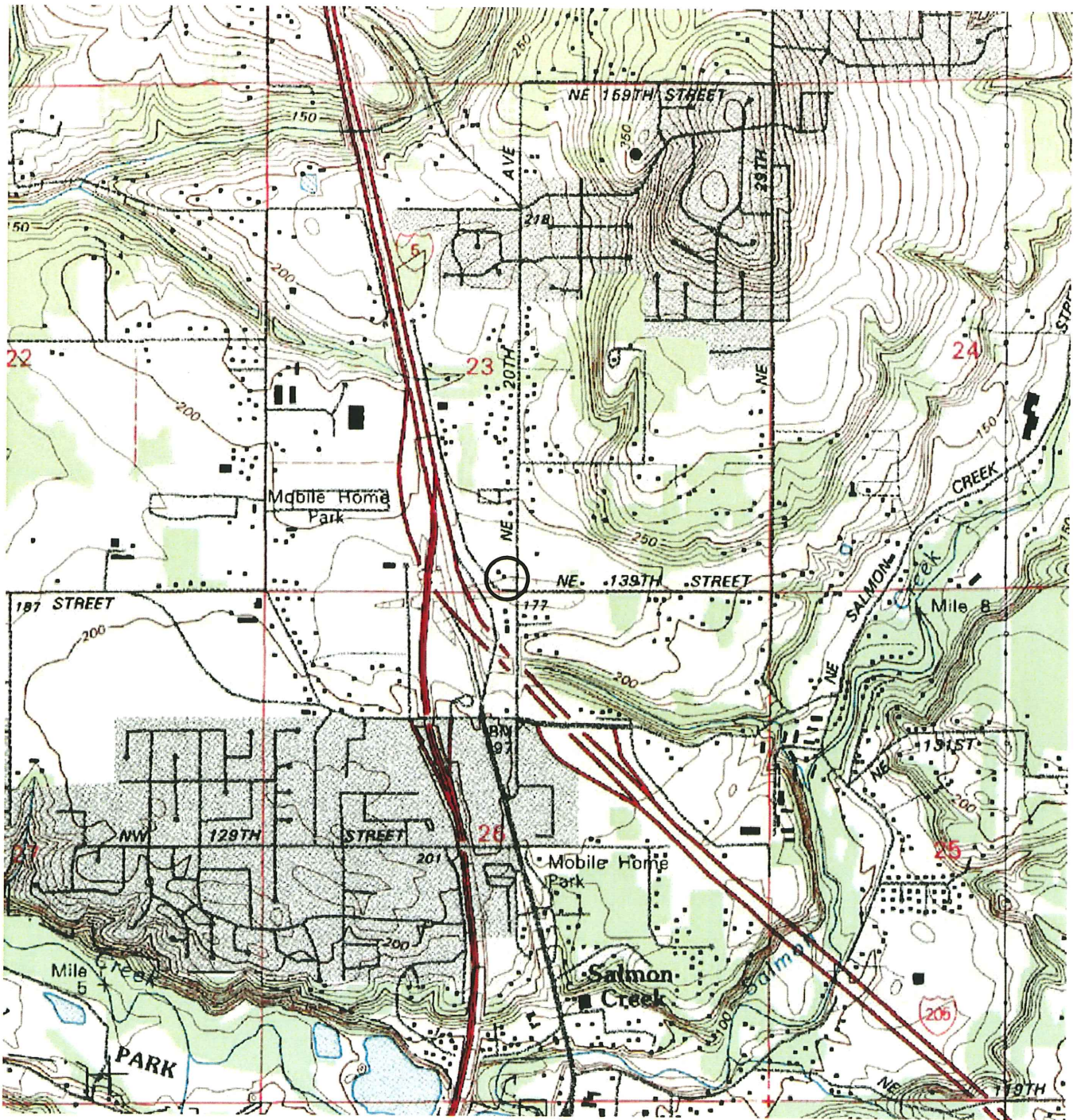
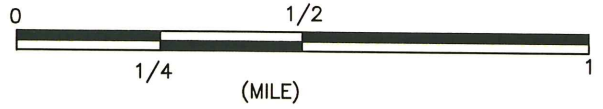
Randall J. Boese, RG
President / Principal

- Attachment A: Figures
- Attachment B: Push-Probe Boring Logs
- Attachment C: Laboratory Reports and Chain of Custody Documents

cc: Don Holsinger, The 205 Group, 2151 NW 21st Place, Ridgefield, WA 98642

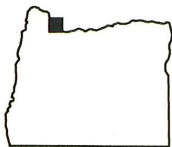
ATTACHMENT A

Figures



○ SITE LOCATION

FIGURE 1



OREGON

FORMER L & C DELI/VISTA MART, 13908 NE 20th Avenue, Vancouver, WA
SITE VICINITY MAP

SOURCE: USGS TOPOGRAPHIC QUADRANGLE
SERIES: 7.5 MINUTES, SALMON CREEK, OR



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Job Code: VOC02ISC.11UC
CADD File: VOC02ISC.11UC
Scale: AS SHOWN
Drawn: KATHRYN DAVIS DESIGNS
Checked: STEVE OMO
Date: 02/10/11



○ SITE LOCATION



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COMMERCIAL PROPERTY
AERIAL

13908 NE 20th AVENUE, VANCOUVER, WA

PROJECT CODE:
VOC01ISC.11UC

DATE:
02/10/11

SCALE:
AS SHOWN

DRAWN:
K.D.DESIGNS

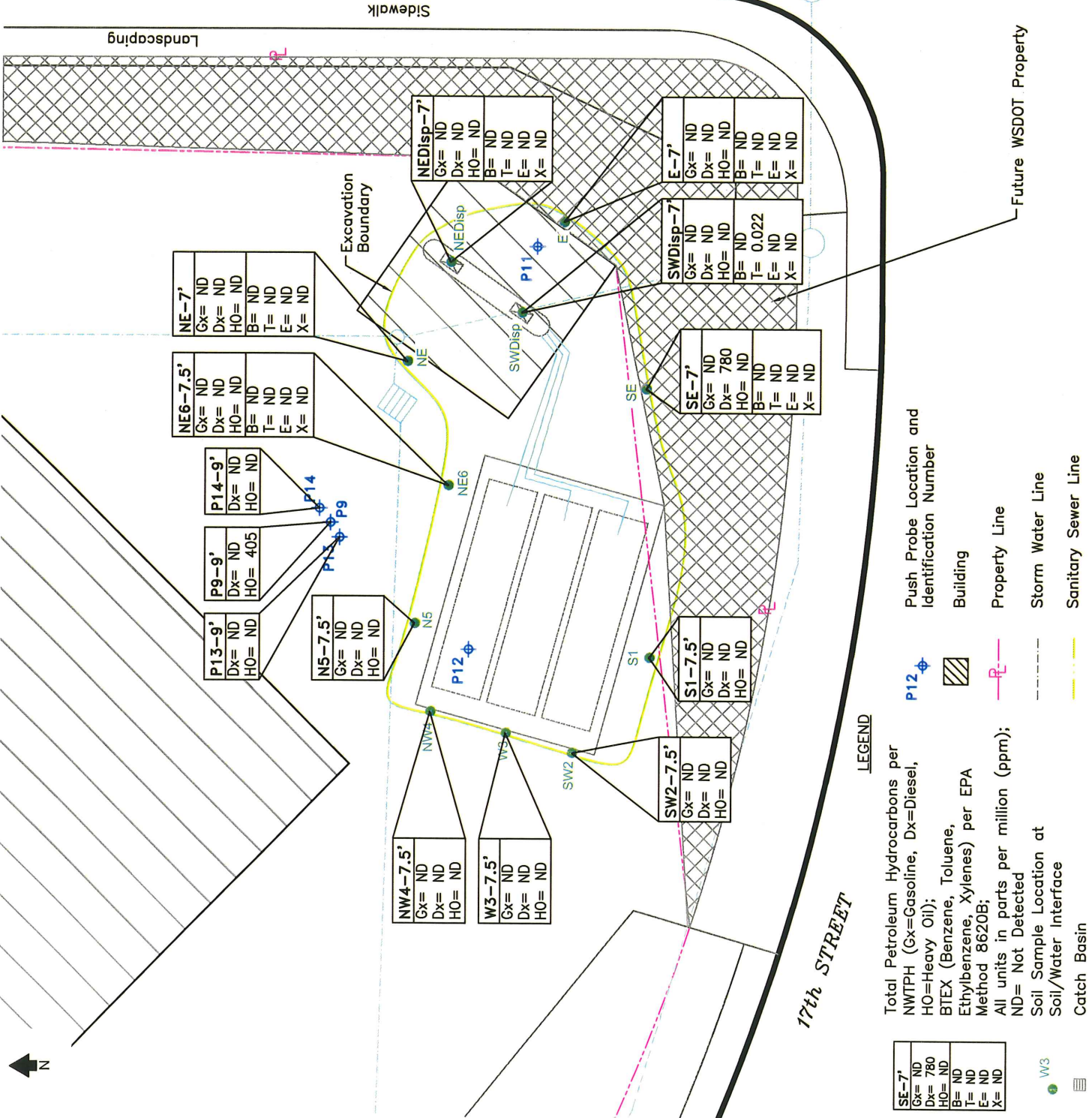
CHECKED:
STEVE OMO

FIGURE #:

2



20th AVENUE



LEGEND

Total Petroleum Hydrocarbons per NWTPH (Gx=Gasoline, Dx=Diesel, HO=Heavy Oil); BTEX (Benzene, Toluene, Ethylbenzene, Xylenes) per EPA Method 8620B; All units in parts per million (ppm); ND= Not Detected

Soil Sample Location at Soil/Water Interface

Catch Basin

Push Probe Location and Identification Number

Building

Property Line

Storm Water Line

Sanitary Sewer Line

Future WSDOT Property

SE-7'	Gx= ND	Dx= 780	HO= ND	B= ND	T= ND	E= ND	X= ND
NW4-7.5'	Gx= ND	Dx= ND	HO= ND	B= ND	T= ND	E= ND	X= ND
W3-7.5'	Gx= ND	Dx= ND	HO= ND	B= ND	T= ND	E= ND	X= ND
NW5-7.5'	Gx= ND	Dx= ND	HO= ND	B= ND	T= ND	E= ND	X= ND
N5-7.5'	Gx= ND	Dx= 405	HO= ND	B= ND	T= ND	E= ND	X= ND
P13-9'	Gx= ND	Dx= ND	HO= ND	B= ND	T= ND	E= ND	X= ND
P9-9'	Gx= ND	Dx= ND	HO= 405	B= ND	T= ND	E= ND	X= ND
P14-9'	Gx= ND	Dx= ND	HO= ND	B= ND	T= ND	E= ND	X= ND
NE6-7.5'	Gx= ND	Dx= ND	HO= ND	B= ND	T= ND	E= ND	X= ND
NE-7'	Gx= ND	Dx= ND	HO= ND	B= ND	T= ND	E= ND	X= ND
NEDisp-7'	Gx= ND	Dx= ND	HO= ND	B= ND	T= ND	E= ND	X= ND
SW2-7.5'	Gx= ND	Dx= ND	HO= ND	B= ND	T= ND	E= ND	X= ND
S1-7.5'	Gx= ND	Dx= ND	HO= ND	B= ND	T= ND	E= ND	X= ND
SE-7'	Gx= ND	Dx= 780	HO= ND	B= ND	T= 0.022	E= ND	X= ND
SWDisp-7'	Gx= ND	Dx= ND	HO= ND	B= ND	T= ND	E= ND	X= ND
E-7'	Gx= ND	Dx= ND	HO= ND	B= ND	T= ND	E= ND	X= ND



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CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS
FORMER L & C DELI/VISTA MART
13908 NE 20th AVENUE, VANCOUVER, WA

FIGURE #:
3

PROJECT CODE: VOC02ISC.11UC DATE: 08/07/12 SCALE: 1"=20' DRAWN: K.D.DESIGNS CHECKED: STEVE OMO

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ATTACHMENT B

Push-Probe Boring Logs

PROBE LOG

PROBE NO.: P13
 PROJECT CODE: VOC02DEC.11UC
 CADD FILE: VOC02-L.DWG
 PROJECT: FORMER L & C DELI/VISTA MART
 LOCATION: 13908 NE 20th Avenue
Vancouver, WA

TOTAL DEPTH: 10'
 SURFACE ELEVATION: _____
 PROBING METHOD: MACRO CORE
 PROBED BY: BB&A ENVIRONMENTAL
 LOGGED BY: STEVE OMO
 DATE COMPLETED: 07/25/12

DEPTH (feet)	SAMPLE IDENTIFICATION AND LAB RESULTS	PID	H ₂ O LEVEL	LITHOLOGIC DESCRIPTION	LITHOLOGY	DEPTH (feet)	PROBE ABANDONMENT
0				- NO SOIL RECOVERY	[Hatched Pattern]	0	[Probe Diagram]
5		0.0		- SILT (ML): brown-gray mottling, trace of clay, firm, no petroleum odor	[Hatched Pattern]	5	[Probe Diagram]
10	P13-9'	0.0			[Hatched Pattern]	10	[Probe Diagram]
15					[Hatched Pattern]	15	[Probe Diagram]
20					[Hatched Pattern]	20	[Probe Diagram]
25					[Hatched Pattern]	25	[Probe Diagram]

LEGEND

BLS Below Land Surface

NOTES: _____

NOTE: CLASSIFICATION OF SOILS BASED ON THE UNITED SOILS CLASSIFICATION SYSTEM.

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PROBE LOG

PROBE NO.: P14
 PROJECT CODE: VOC02DEC.11UC
 CADD FILE: VOC02-L.DWG
 PROJECT: FORMER L & C DELI/VISTA MART
 LOCATION: 13908 NE 20th Avenue
 Vancouver, WA

TOTAL DEPTH: 10'
 SURFACE ELEVATION: _____
 PROBING METHOD: MACRO CORE
 PROBED BY: BB&A ENVIRONMENTAL
 LOGGED BY: STEVE OMO
 DATE COMPLETED: 07/25/12

DEPTH (feet)	SAMPLE IDENTIFICATION AND LAB RESULTS	PID	H ₂ O LEVEL	LITHOLOGIC DESCRIPTION	LITHOLOGY	DEPTH (feet)	PROBE ABANDONMENT
0				- NO SOIL RECOVERY		0	
5		0.0		- SILT (ML): brown-gray mottling, trace of clay, firm, no petroleum odor		5	
10	P14-9'	0.0				10	
15						15	
20						20	
25						25	

LEGEND

BLS Below Land Surface

NOTES: _____

NOTE: CLASSIFICATION OF SOILS BASED ON THE UNITED SOILS CLASSIFICATION SYSTEM.

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ATTACHMENT C

Laboratory Report and Chain-of-Custody Documents

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Portland
9405 SW Nimbus Ave.
Beaverton, OR 97008
Tel: (503)906-9200

TestAmerica Job ID: 250-5210-1

TestAmerica Sample Delivery Group: VOCO2DEC.12UC
Client Project/Site: L&C Deli

For:

BB&A Environmental
25195 SW Parkway Ave
Suite # 207
Wilsonville, Oregon 97070

Attn: Steve Omo



Authorized for release by:
7/31/2012 1:04:51 PM

Peggy Siegfried
Project Manager I
peggy.siegfried@testamericainc.com

Designee for

Vanessa Frahs
Project Manager I
vanessa.frahs@testamericainc.com

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: BB&A Environmental
Project/Site: L&C Deli

TestAmerica Job ID: 250-5210-1
SDG: VOCO2DEC.12UC

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
250-5210-1	VOCO2-P13-9'	Solid	07/25/12 09:30	07/25/12 12:25
250-5210-2	VOCO2-P14-9'	Solid	07/25/12 09:40	07/25/12 12:25

Case Narrative

Client: BB&A Environmental
Project/Site: L&C Deli

TestAmerica Job ID: 250-5210-1
SDG: VOCO2DEC.12UC

Job ID: 250-5210-1

Laboratory: TestAmerica Portland

Narrative

Job Narrative 250-5210-1

Comments

No additional comments.

Receipt

The samples were received on 7/25/2012 12:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 10.6° C.

Except:

The following sample(s) was received at the laboratory outside the required temperature criteria: VOCO2-P13-9' (250-5210-1), VOCO2-P14-9' (250-5210-2). The sample(s) is considered acceptable since it was collected and submitted to the laboratory on the same day and there is evidence that the chilling process has begun.

GC Semi VOA

Method(s) AK102 & 103, NWTPH-Dx: Due to the level of dilution required for the following sample(s), surrogate recoveries are not useful (250-5154-3 DU), AF44708 Gravel Cell #3 (250-5154-3).

Method(s) AK102 & 103, NWTPH-Dx: Detected hydrocarbons in the oil range appear to be due to oil as well as biogenic interference. (250-5154-3 DU), AF44708 Gravel Cell #3 (250-5154-3)

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Definitions/Glossary

Client: BB&A Environmental
Project/Site: L&C Deli

TestAmerica Job ID: 250-5210-1
SDG: VOCO2DEC.12UC

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: BB&A Environmental
Project/Site: L&C Deli

TestAmerica Job ID: 250-5210-1
SDG: VOCO2DEC.12UC

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Client Sample ID: VOCO2-P13-9'

Date Collected: 07/25/12 09:30

Date Received: 07/25/12 12:25

Lab Sample ID: 250-5210-1

Matrix: Solid

Percent Solids: 86.5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	ND		14		mg/Kg	*	07/27/12 13:26	07/27/12 22:44	1
RRO (nC25-nC36)	ND		29		mg/Kg	*	07/27/12 13:26	07/27/12 22:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	86		50 - 150				07/27/12 13:26	07/27/12 22:44	1

Client Sample ID: VOCO2-P14-9'

Date Collected: 07/25/12 09:40

Date Received: 07/25/12 12:25

Lab Sample ID: 250-5210-2

Matrix: Solid

Percent Solids: 89.0

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	ND		14		mg/Kg	*	07/27/12 13:26	07/27/12 23:01	1
RRO (nC25-nC36)	ND		28		mg/Kg	*	07/27/12 13:26	07/27/12 23:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	84		50 - 150				07/27/12 13:26	07/27/12 23:01	1

Client Sample Results

Client: BB&A Environmental
Project/Site: L&C Deli

TestAmerica Job ID: 250-5210-1
SDG: VOCO2DEC.12UC

General Chemistry

Client Sample ID: VOCO2-P13-9'

Date Collected: 07/25/12 09:30

Date Received: 07/25/12 12:25

Lab Sample ID: 250-5210-1

Matrix: Solid

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86		0.010		%			07/27/12 13:24	1

Client Sample ID: VOCO2-P14-9'

Date Collected: 07/25/12 09:40

Date Received: 07/25/12 12:25

Lab Sample ID: 250-5210-2

Matrix: Solid

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.010		%			07/27/12 13:24	1

QC Sample Results

Client: BB&A Environmental
Project/Site: L&C Deli

TestAmerica Job ID: 250-5210-1
SDG: VOCO2DEC.12UC

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 250-8120/1-A
Matrix: Solid
Analysis Batch: 8100

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8120

Analyte	MB MB		RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
DRO (C10-C25)	ND		12		mg/Kg		07/27/12 13:26	07/27/12 18:54	1
RRO (nC25-nC36)	ND		25		mg/Kg		07/27/12 13:26	07/27/12 18:54	1
Surrogate	MB MB		Limits			Prepared	Analyzed	Dil Fac	
%Recovery	Qualifier								
1-Chlorooctadecane	100		50 - 150			07/27/12 13:26	07/27/12 18:54	1	

Lab Sample ID: LCS 250-8120/2-A
Matrix: Solid
Analysis Batch: 8100

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8120

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
DRO (C10-C25)	123	121		mg/Kg		98	50 - 150
RRO (nC25-nC36)	73.8	66.0		mg/Kg		89	50 - 150
Surrogate	LCS LCS		Limits			%Recovery	Qualifier
%Recovery	Qualifier						
1-Chlorooctadecane	105		50 - 150				

Lab Sample ID: 250-5154-A-1-E DU
Matrix: Solid
Analysis Batch: 8100

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 8120

Analyte	Sample Sample		DU DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
DRO (C10-C25)	54		49.8		mg/Kg	⊛	8	40
RRO (nC25-nC36)	83		67.2		mg/Kg	⊛	21	40
Surrogate	DU DU		Limits			%Recovery	Qualifier	
%Recovery	Qualifier							
1-Chlorooctadecane	102		50 - 150					

Lab Sample ID: 250-5154-A-3-D DU
Matrix: Solid
Analysis Batch: 8100

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 8120

Analyte	Sample Sample		DU DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
DRO (C10-C25)	2200		1940		mg/Kg	⊛	11	40
RRO (nC25-nC36)	11000		9830		mg/Kg	⊛	10	40
Surrogate	DU DU		Limits			%Recovery	Qualifier	
%Recovery	Qualifier							
1-Chlorooctadecane	101		50 - 150					

Method: D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Lab Sample ID: 250-5210-1 DU
Matrix: Solid
Analysis Batch: 8119

Client Sample ID: VOCO2-P13-9'
Prep Type: Total/NA

Analyte	Sample Sample		DU DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Percent Solids	86		86		%		0.3	20

QC Association Summary

Client: BB&A Environmental
Project/Site: L&C Deli

TestAmerica Job ID: 250-5210-1
SDG: VOCO2DEC.12UC

GC Semi VOA

Analysis Batch: 8100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-5154-A-1-E DU	Duplicate	Total/NA	Solid	NWTPH-Dx	8120
250-5154-A-3-D DU	Duplicate	Total/NA	Solid	NWTPH-Dx	8120
250-5210-1	VOCO2-P13-9'	Total/NA	Solid	NWTPH-Dx	8120
250-5210-2	VOCO2-P14-9'	Total/NA	Solid	NWTPH-Dx	8120
LCS 250-8120/2-A	Lab Control Sample	Total/NA	Solid	NWTPH-Dx	8120
MB 250-8120/1-A	Method Blank	Total/NA	Solid	NWTPH-Dx	8120

Prep Batch: 8120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-5154-A-1-E DU	Duplicate	Total/NA	Solid	3550B	
250-5154-A-3-D DU	Duplicate	Total/NA	Solid	3550B	
250-5210-1	VOCO2-P13-9'	Total/NA	Solid	3550B	
250-5210-2	VOCO2-P14-9'	Total/NA	Solid	3550B	
LCS 250-8120/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 250-8120/1-A	Method Blank	Total/NA	Solid	3550B	

General Chemistry

Analysis Batch: 8119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-5210-1	VOCO2-P13-9'	Total/NA	Solid	D2216-80	
250-5210-1 DU	VOCO2-P13-9'	Total/NA	Solid	D2216-80	
250-5210-2	VOCO2-P14-9'	Total/NA	Solid	D2216-80	

Certification Summary

Client: BB&A Environmental
Project/Site: L&C Deli

TestAmerica Job ID: 250-5210-1
SDG: VOCO2DEC.12UC

Laboratory: TestAmerica Portland

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	OR00040	06-30-13
Alaska (UST)	State Program	10	UST-012	12-26-12
California	State Program	9	2597	09-30-13
Oregon	NELAC	10	OR100021	01-09-13
USDA	Federal		P330-11-00092	02-17-14
Washington	State Program	10	C586	06-23-12

Method Summary

Client: BB&A Environmental
Project/Site: L&C Deli

TestAmerica Job ID: 250-5210-1
SDG: VOCO2DEC.12UC

Method	Method Description	Protocol	Laboratory
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	TAL PRT
D2216-80	Percent Dry Weight (Solids) per ASTM D2216-80	ASTM	TAL PRT

Protocol References:

ASTM = ASTM International

NWTPH = Northwest Total Petroleum Hydrocarbon

Laboratory References:

TAL PRT = TestAmerica Portland, 9405 SW Nimbus Ave., Beaverton, OR 97008, TEL (503)906-9200

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244
 5755 8th Street East, Tacoma, WA 98424
 9405 SW Nimbus Ave, Beaverton, OR 97008-7145
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

Loc: 250
5210

CHAIN OF CUSTODY REPORT

Work Order #

CLIENT: **DBEA ENVIRONMENTAL**
 REPORT TO: **25195 SW Parkway ABL #207**
 ADDRESS: **WILSONVILLE OR**
 PHONE: **Lec Deli** FAX:
 PROJECT NAME: **Steve Omo**
 PROJECT NUMBER: **VOC02 DEC-12 UC**
 SAMPLED BY: **Steve Omo**

INVOICE TO: **Ron Bergeson**
 P.O. NUMBER:

PRESERVATIVE
 REQUESTED ANALYSES

TURNAROUND REQUEST
 in Business Days *
 Organic & Inorganic Analyses
 Petroleum Hydrocarbon Analyses

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1. VOC02 - P13 - 9'	7-25-12 9:30 ✓	S	1		
2. VOC02 - P14 - 9'	7-25-12 9:40 ✓	S	1		
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

RELEASED BY: **Steve Omo** DATE: **7-25-12**
 PRINT NAME: **STEVE OMO** TIME: **12:25**
 RECEIVED BY: **Tom Krause** DATE: **07/25/12**
 PRINT NAME: **Tom Krause** TIME: **12:25**
 FIRM: **DBEA** FIRM: **TAP**

RECEIVED BY: **Tom Krause** DATE: **07/25/12**
 PRINT NAME: **Tom Krause** TIME: **12:25**
 FIRM: **TAP**

ADDITIONAL REMARKS:
10/6/13

TEMP: **106** PAGE **OF**

TAL-1000 (0212)

Login Sample Receipt Checklist

Client: BB&A Environmental

Job Number: 250-5210-1
SDG Number: VOCO2DEC.12UC

Login Number: 5210

List Number: 1

Creator: Svabik-Seror, Philip

List Source: TestAmerica Portland

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Table 749-1

Simplified Terrestrial Ecological Evaluation-Exposure Analysis Procedure

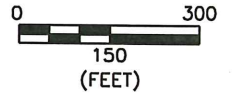
Estimate the area of contiguous (connected) <u>undeveloped land</u> on the site or within 500 feet of any area of the site to the nearest 1/2 acre (1/4 acre if the area is less than 0.5 acre).		
1) From the table below, find the number of points corresponding to the area and enter this number in the field to the right.		
	<u>Area (acres)</u>	<u>Points</u>
	0.25 or less	4
	0.5	5
	1.0	6
	1.5	7
	2.0	8
	2.5	9
	3.0	10
	3.5	11
	4.0 or more	12
2) Is this an <u>industrial</u> or <u>commercial</u> property? If yes, enter a score of 3. If no, enter a score of 1		3
3) ^a Enter a score in the box to the right for the habitat quality of the site, using the following rating system ^b . High=1, Intermediate=2, Low=3		3
4) Is the undeveloped land likely to attract wildlife? If yes, enter a score of 1 in the box to the right. If no, enter a score of 2. ^c		2
5) Are there any of the following soil contaminants present: Chlorinated dioxins/furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, pentachlorobenzene? If yes, enter a score of 1 in the box to the right. If no, enter a score of 4.		4
6) Add the numbers in the boxes on lines 2-5 and enter this number in the box to the right. If this number is larger than the number in the box on line 1, the simplified evaluation may be ended.		12

Notes for Table 749-1

^a It is expected that this habitat evaluation will be undertaken by an experienced field biologist. If this is not the case, enter a conservative score of (1) for questions 3 and 4.

^b **Habitat rating system.** Rate the quality of the habitat as high, intermediate or low based on your professional judgment as a field biologist. The following are suggested factors to consider in making this evaluation:

Low: Early successional vegetative stands; vegetation predominantly noxious, nonnative, exotic plant species or weeds. Areas severely disturbed by human activity, including intensively cultivated croplands. Areas isolated from other habitat used by wildlife.



LEGEND



Undeveloped Land Area



EUGENE OFFICE
32986 Roberts Ct.
Coburg, OR
ph: 541.484.9484

PORTLAND OFFICE
25195 SW Parkway Ave., #207
Wilsonville, OR
ph: 503.570.9484

www.BBAENV.COM

**TERRESTRIAL ECOLOGICAL EVALUATION
COMMERCIAL PROPERTY**
13908 NE 20th AVENUE, VANCOUVER, WA

FIGURE #:

4

PROJECT CODE: VOC01ISC.11UC	DATE: 08/07/12	SCALE: AS SHOWN	DRAWN: K.D.DESIGNS	CHECKED: STEVE OMO
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