

Northwest Environmental Solutions, Inc.

Phase II ESA - 2019-114

Limited Phase II Environmental Site Assessment

April 2, 2019

Ecology Tag No. A4180
Ecology Site ID No. 3993
Ecology Facility Site ID No. 56645196

RECEIVED

OCT 07 2019
WA State Department
of Ecology (SWRO)

Prepared by:

Kevin Wilkerson
POB 1583
Sumner, WA. 98390

Prepared for:

Krista Sommer
2312 Pearl Street N
Centralia, WA. 98531

ICC: 874113 U1-U7, NACE, STI, EIT, Purpora Engineering, RSA

Kirsten,
Thank-you so much for your help, it is
very much appreciated!

KEISTA Sommer

RECEIVED

OCT 07 2019

WA State Department
of Ecology (SWRO)

Northwest Environmental Solutions, Inc.

Phase II ESA - 2019-114

April 2, 2019

Reliance Food Center, Inc - Pearl Street Market
2312 Pearl Street N
Centralia, WA. 98531

Attention: Krista Sommer

Re. Phase II Environmental Site Assessment Report

NES, Inc. is please to submit our report describing the findings of the Phase II ESA for Pearl Street Market. This assessment was prepared in general accordance with the Phase II ESA Process (ASTM Designation: E1903-11).

The purpose of the Phase II ESA was to evaluate the recognized environmental conditions identified on the subject site.

If you have any questions or require further clarification of the report finding, please contact the undersigned at your convenience. Thank you for the opportunity to be of service to Peal Street Market.

Yours very truly,

NES, Inc.

Kevin Wilkerson – RSA

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Enclosed

Appendix A – Dept. of Ecology Data Base

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Executive Summary

1.0 INTRODUCTION

- The subject property is located at 2312 Pearl Street N. Centralia, WA. 98531 – Parcel No. 002768141000, Lat. 46.74541 Long. -122.95366. The site was built in 1965, the subject site is 2.840 acres. The site consists of a convenience store (6160 sq. ft), steel canopy with two suction pump and two underground storage tanks (1) 10000 gallon and (1) two compartment 4000/6000-gallon spilt tank (PLASTEEL). These tanks are located on the NW corner – center parking lot. The new tanks were installed in May 1995, they are single wall with CLAD coating (Ref: DOE TCP Data Base), the product lines are double wall fiberglass reinforced piping which terminate into sumps with no sensors. The tanks are monitored by a Veederroot TLS 300 with CSLD testing. All samples collected were from the tank field and product line chase. The samples were advanced 2' below tank bottom and product line chase. This site is listed on the WA. State DOE "LUST or Cleanup Site List" – Clean up No. 9748. The original tanks were installed in or around 1975 (DOE), I have documents of two install dates ranging from (1960 and 1975). The document stating 1960 was from Time Oil installing this document was from (Patty Martin – SW Regional Office - DOE). The tanks were pulled by Anderson Petroleum Company they removed approx. 250 cu yards soil from the property and proceeded with a cleanup the initial investigation was completed in September 2011. Past paperwork states Transglobal Environmental Geosciences NW removed 3 soil samples and the doc's provided are Non-Detect this was performed on August 13, 1998 they tested for TPH-Gasoline. This site needs to initiate a VCP plan with the WA. State Dept. of Ecology to receive recommendations for a "NFA" No Further Action Letter.

➤

LUST - Notification Completed 4/24/1995

Site Discovery/Release Report Received Completed 4/24/1995

LUST - Report Received Completed 6/20/1995

Initial Investigation / Federal Preliminary Assessment Completed 9/30/2011

Early Notice Letter(s) Completed 9/30/2011

1.1 General Site Information (Site Contacts and Stakeholders)

Pearl Street Market – 2312 Pearl Street N Centralia, WA. 98531

Krista Sommer – 360-388-0221

WA: State Department of Ecology – 360-407-7000

Location information: 54 Retail Food

- Legal description: Section 32 Township 15N Range 02W N 176.42' W 200' LOT 20 & N 152' S 456' LOT 21 AUGUST SAWALL ADD
Centralia, Washington, in Lewis county, is 37 miles SW of Lakewood, Washington (center to center) and 68 miles SW of Seattle, Washington.

1.2 Site History

➤ Centralia History

- This region served as a halfway stopover point for stagecoaches that ran between Seattle and Columbia River. J.G. Cochran, from Missouri, filed for a donation land claim in this area in 1850. Two years later he sold his claim. The new owner of the land filed a plat for Centerville. He also built his home there. Eventually the area was incorporated in February 1886. However, another town named Centerville already existed in the state. This caused much confusion and ultimately led to the renaming of this town to Centralia in 1891.

2.0 Field Investigations

2.1 Site Characterizations

- The soil samples were collected from the tank field by truck mounted Geo Probe 5410 advancing to depths 2 bg ft below tank bottom and product line. The tank depth is approximately 11 below grade – max sampling depth was 14'. The soil encountered was brown sand to brown sand with gravel. The soil is dense and is consistent with SM (Silty Sands, Gravel mix) as described in the Unified Soil Classification System. No water was encounter below tank bottom during the investigation.
- Samples were collected by Kevin Wilkerson – RSA #874113
- **PID (Photo Ionization Detector) performed with sampling**
- **Sheen Testing performed with sampling**

2.2 Scope of work

NES, Inc. performed the visual, physical, photographic field inspection, soil collection and review. We complied and submitted the final report on April 1, 2019. Inquires or further information regarding this report, the presentation of the information and the interpretation of the data should be referred to Mr. Wilkerson, of NES, Inc.

- Locate underground utilities
- Advance Geoprobe to collect water and soil samples;
- Submitting samples for laboratory analysis; and
- Preparing this report and summarizing our observations and findings

This report is generated to define the condition of the specified properties with respect to subsurface contamination and compliance with current Department of Ecology regulation pursuant to WAC 173-360.

2.3 Subsurface Soil Sampling

The soil samples were collected by a truck mounted Geo Probe 5410. The tank depth is approximately 11 feet Bgs – max sampling depth was 14 feet Bgs. The samples were advanced with 3'-5' sections of threaded 1 ½" diameter drive rods to the desired depth. A 2' stainless steel tube sampler equipped with a 2'x1 ½" polycarbonate insert was fitted to the end of the drive rod. The drive rods are pulled from the sample location and the sample tube was removed to recover the soil from the sample tube. The soil encountered was brown sand to brown sand with gravel. The soil is dense and is consistent with SM (Silty Sands, Gravel Mix) as described in the Unified Soil Classification System. After the collection, the soil samples were collected and placed in four-ounce glass jars, which were laboratory-certified. Samples were placed into the jars, leaving no headspace, labeled and placed into a zip-lock bag, placed into a cooler with ice-substitute. Each sample container as clearly labeled as to collection and sample number/depth, date, time, project, etc. EPA- recommended sample-management protocol was observed at each stage of the project. A field log was used for soil and PID readings. The cooler was delivered to Libby Environmental (4139 Libby Road NE Olympia, WA. 98506).

3.0 Soil Cleanup Standard

3.1 MTCA (Model Toxic Control Act) Method A Clean Up Levels

Hazardous Substances	CAS Number	Cleanup Level – Water - ug/liter	Cleanup Level – Soil – mg/kg
Arsenic	7440.38-2	5	20
Benzene	71-43-2	5	0.03
Benzo(a)pyrene	50-32-8	0.1	2
Cadmium	7440-43-9	5	2
Chromium		50 (TOTAL)	
Chromium VI	18540-29-9		19
Chromium III	16065-83-1		2000
DDT	50-29-3	0.3	4
Ethylbenzene	100-41-4	700	6
Ethylbenzene (EDB)	106-93-4	0.01	0.005
Lead	7439-92-1	15	1000
Lindane	58-89-9	0.2	0.01
Methylene Chloride	75-09-2	5	0.02
Mercury	7439-97-6	2	2
MTBE	1634-04-4	20	0.1
Naphthalene's	91-20-3	160	5
PAHs (Carcinogenic)		See benzo(a)pyrene	See benzo(a)pyrene
PCB Mixtures		0.1	10
Tetrachloroethylene	127-18-4	5	0.05
Toluene	108-88-3	1000	7
Gasoline Range Organics		800 w Benzene 1000 w/o Benzene	100 w/o Benzene / 30 with B
Diesel Range Organics		500	2000
Heavy Oils		500	2000
Mineral Oils		500	4000
Trichloroethane	71-55-6	200	2
Trichloroethylene	79-01-6	5	0.03
Xylenes	1330-20-7	1000	9

Northwest Environmental Solutions, Inc.

Phase II ESA - 2019-114

3.2 Soil Sample Results – September 17, 2018

Date:	Sample ID	Depth	Gasoline	Diesel	Benzene	Ethylbenzene	Toluene	Xylenes
04/01/2019	1SB N	14'	ND	ND	ND	ND	ND	ND
04/01/2019	3SB W	14'	ND	ND	ND	ND	ND	ND
04/01/2019	4SB PL	4'	ND	ND	ND	ND	ND	ND
04/01/2019	5SB E	14'	ND	ND	ND	ND	ND	ND
04/01/2019	2SB N Water	6'	ND	ND	ND	ND	ND	ND
WDOE Target Compliance Level			30 or 100	2000	0.03	6	7	9

Date:	Sample ID	Depth	Lead	Cadmium	Chromium	Arsenic	Mercury
04/01/2019	1SB N	14'	41				
04/01/2019	3SB W	14'	10.4				
04/01/2019	4SB PL	4'	6.7				
04/01/2019	5SB E	14'	ND				
WDOE Target Compliance Level			1000	2	19	20	2

3.3 Photo Ionization Detector Readings – MINI RAE 3000

PID Readings:

1) 1.2 2) 0.3 1.2 4) 0.7 5) .8

Notes:

- 1.0 "ND" denotes analyte not detected at or above listed Reporting Limit.
- 2.0 "NA" denotes sample not analyzed for specific analyte.
- 3.0 "Report limit" represents the laboratory lower quantitation limit.
- 4.0 Method A soil cleanup levels as published in the Model Toxics Control Act (MTCA) 173-340-WAC
- 5.0 The MTCA gasoline TPH cleanup level is 30 ppm for soils with benzene otherwise it is 100 ppm.
- 6.0 Soil samples were field screened using a field screened using a GasTech combustible gas meter to measure the concentration of combustible gas, such as petroleum VOCs. Headspace VOC concentration were measure after placing the soil sample in a sealed plastic bag and allowing soil and air inside the bag to equilibrate.

Bold and italics denotes concentration above MTCA Method A soil cleanup levels.

BGS- Below ground surface

3.4 Sample Locations



4.0 Conclusions

NES has conducted a Phase II ESA of the subject site (2312 Pearl Street N. Centralia, WA. 98531). in the professional opinion of Northwest Environmental Solutions, Inc. (NES) has removed samples in accordance to WA. State DOE 173-360. All samples were below MTCA Clean up Levels.

4.1 Recommendations – Initiate VCP Plan to remove from LUST List and apply for an NFA from Ecology

Acronyms and Abbreviations

Acronyms & Abbreviations	Definitions
ARAR	Applicable or Relevant and Appropriate Requirements
bgs	below ground surface
COC	Contaminant/Chemical of Concern
CSID	Cleanup Site Identification number
CSM	Conceptual Site Model
CUL	clean-up levels
Ecology	Washington State Department of Ecology
FOC	Fraction of Organic Carbon
FSID	Facility Site identification number
MTCA	Model Toxics Control Act
PID	Photoionization detector
PSD	particle size distribution
QAPP	Quality Assurance Project Plan
RCW	Revised Code of Washington
SAP	Sampling and Analysis Plan
TEE	Terrestrial Ecological Evaluation
TPH	total petroleum hydrocarbon
VCP	Voluntary Cleanup Program
WAC	Washington State Administrative Code

References

The style of cited references should be consistent throughout the document.

The following is list of resources to assist in conducting a remedial investigation and in preparing your report. This list is not exhaustive and should not be interpreted as a sole source of Applicable State and Federal Laws (ARARs) and guidance documents.

- Lombard, S. and C. Kirchmer, 2004. *Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies*. Washington State Department of Ecology, Olympia, Washington. 48 pages + appendices. Publication No. 04-03-030. <http://www.ecy.wa.gov/biblio/0403030.html>
- Ecology, revised 2013. *Model Toxics Control Act Regulation and Statute*. Washington State Department of Ecology, Olympia, Washington. 324 pages. Publication No. 94-06. <http://www.ecy.wa.gov/biblio/9406.html>
- Ecology, revised 2011. *Guidance for Remediation of Petroleum Contaminated Sites*. Washington State Department of Ecology, Olympia, Washington. 197 pages. Publication No. 10-09-057. <https://fortress.wa.gov/ecy/publications/SummaryPages/1009057.html>
- Puls, R.W. and Barcelona, M.J, 1996. *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures*, EPA/540/S-95/504, April 1996. <http://www.epa.gov/remedytech/low-flow-minimal-drawdown-ground-water-sampling-procedures>
- U.S. EPA Region I, 1996. *Low Stress (low flow) Purging and Sampling Procedure for the Collection of Groundwater samples from Monitoring Wells*, EQASOP-GW 001, Revised January 2010. <http://www.epa.gov/sites/production/files/2015-06/documents/EQASOP-GW001.pdf>

13.0 Limitation

The opinion expressed herein is based on the information collected during our study, our present understanding of the site conditions and our professional judgment in light of such information at the time of preparation of this opinion. The report is a professional opinion work, and no warrant is either expressed, implied or made as to the conclusions, advice and recommendations offered in this report.

The interpretations and conclusions contained in this report are based on the results of laboratory tests and analysis intended to detect the presence and concentration of certain chemical constituents in samples taken from the subject property. Consultant has no involvement in, or control over, such testing and analysis and has no non-laboratory means of confirming the accuracy of such laboratory results. Consultant, therefore, disclaims any responsibility for any inaccuracy in such laboratory results.

The findings, conclusions and recommendations in the report are considered valid as of the present date. However, changes in the conditions of the property can occur with the passage of time, due to natural process or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standard may occur. Accordingly, portions of this report may be invalidated wholly or partially by the changes beyond our control.

If you have any questions or if we can be of further assistance, please do not hesitate to contact office at (253)241-6213

Respectfully submitted;

Kevin Wilkerson – RSA # 874113-U7.

NW Environmental Solutions, Inc.

Appendix A

Underground Storage Tank System Summary

UST ID: 3993
Site Name: RELIANCE FOOD CENTER INC
[Glossary](#)

UST ID: 3993	Facility/Site ID: 56646196	Latitude: 46.74541	Active Tag: A4180
Address: 2312 N PEARL ST		Longitude: -122.95366	Responsible Unit: Southwest
CENTRALIA, WA 98531		County: Lewis	

Tank Summary

Tank Name	Tank Status	Tank Install Date
A	Operational	5/1/1995
2	Operational	5/1/1995
290	Removed	6/1/1975
289	Removed	6/1/1975

Tank Name: A	Tank Status: Operational
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Tank Installation: 5/1/1995	Tank Upgrade: 5/1/1995	Business License Endorsement Expiration: 9/30/2019
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Tank Status Date: 12/10/1999	Piping Installation:	Tank Permanently Closed Date:
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Tank Information		Piping Information	
Material:	Steel Clad with Corrosion Resistant Composite	Material:	Fiberglass
Construction:	Single Wall Tank	Construction:	Double Wall Pipe
Corrosion Protection:	Corrosion Resistant	Corrosion Protection:	Corrosion Resistant
Manifolded Tank:		SFC* at Tank:	
Release Detection:	Automatic Tank Gauging	SFC* at Dispenser/Pump:	
Tightness Test:		Primary Release Detection:	Safe Suction (N ₂ Leak Detection)
Spill Prevention:	Spill Bucket/Spill Box	Secondary Release Detection:	
Overfill Prevention:	Automatic Shutoff (fill pipe)	Pumping System:	Safe Suction
Actual Capacity:	10,000 Gallons	Turbine Sump Construction:	
Capacity Range:	10,000 to 19,999 Gallons	*SFC = Steel Flex Connector	
Compartment	Substance Stored	Substance Used	Capacity
2	Unleaded Gasoline	Motor Fuel for Vehicles	10,000 Gallons

Underground Storage Tank System Summary

UST ID: 3993

Tank Name: 2		Tank Status: Operational	
Tank Installation: 5/1/1995	Tank Upgrade: 5/1/1995	Business License Endorsement Expiration: 9/30/2019	
Tank Status Date: 12/10/1999		Piping Installation:	Tank Permanently Closed Date:
Tank Information		Piping Information	
Material:	Steel Clad with Corrosion Resistant Composite	Material:	Fiberglass
Construction:	Single Wall Tank	Construction:	Double Wall Pipe
Corrosion Protection:	Corrosion Resistant	Corrosion Protection:	Corrosion Resistant
Manifolded Tank:		SFC* at Tank:	
Release Detection:	Automatic Tank Gauging	SFC* at Dispenser/Pump:	
Tightness Test:		Primary Release Detection:	Safe Suction (No Leak Detection)
Spill Prevention:	Spill Bucket/Spill Box	Secondary Release Detection:	
Overfill Prevention:	Automatic Shutoff (fill pipe)	Pumping System:	Safe Suction
Actual Capacity:	10,000 Gallons	Turbine Sump Construction:	
Capacity Range:	10,000 to 19,999 Gallons	*SFC = Steel Flex Connector	
Compartment	Substance Stored	Substance Used	Capacity
1	Unleaded Gasoline	Motor Fuel for Vehicles	4,000 Gallons
2	Unleaded Gasoline	Motor Fuel for Vehicles	6,000 Gallons

Tank Name: 290		Tank Status: Removed	
Tank Installation: 6/1/1975	Tank Upgrade:	Business License Endorsement Expiration: 7/1/1995	
Tank Status Date: 8/6/1996		Piping Installation:	Tank Permanently Closed Date:
Tank Information		Piping Information	
Material:	Steel	Material:	Steel
Construction:	Single Wall Tank	Construction:	
Corrosion Protection:		Corrosion Protection:	
Manifolded Tank:		SFC* at Tank:	
Release Detection:	Manual Inventory Control (daily)	SFC* at Dispenser/Pump:	
Tightness Test:		Primary Release Detection:	
Spill Prevention:		Secondary Release Detection:	
Overfill Prevention:		Pumping System:	Gravity Delivery System (No Pump)
Actual Capacity:	6,000 Gallons	Turbine Sump Construction:	
Capacity Range:	5,000 to 9,999 Gallons	*SFC = Steel Flex Connector	
Compartment	Substance Stored	Substance Used	Capacity
1	Leaded Gasoline		6,000 Gallons

Underground Storage Tank System Summary

UST ID: 3993

Tank Name: 289		Tank Status: Removed	
Tank Installation: 6/1/1975	Tank Upgrade:	Business License Endorsement Expiration: 7/1/1995	
Tank Status Date: 8/6/1996	Piping Installation:	Tank Permanently Closed Date:	
Tank Information		Piping Information	
Material: Steel		Material: Steel	
Construction: Single Wall Tank		Construction:	
Corrosion Protection:		Corrosion Protection:	
Manifolded Tank:		SFC* at Tank:	
Release Detection: Manual Inventory Control (daily)		SFC* at Dispenser/Pump:	
Tightness Test:		Primary Release Detection:	
Spill Prevention:		Secondary Release Detection:	
Overfill Prevention:		Pumping System: Gravity Delivery System (No Pump)	
Actual Capacity: 8,000 Gallons		Turbine Sump Construction:	
Capacity Range: 5,000 to 9,999 Gallons		*SFC = Steel Flex Connector	
Compartment	Substance Stored	Substance Used	Capacity
1	Unleaded Gasoline		8,000 Gallons

Cleanup Site Details

Cleanup Site ID: 9748

Cleanup Site ID: 9748	Facility/Site ID: 56646196	UST ID: 3993	Site Page	Site Documents	View Map
Cleanup Site Name: PEARL STREET MARKET					Glossary
Alternate Names: PEARL STREET MARKET, RELIANCE FOOD CENTER INC					

LOCATION					
Address: 2312 PEARL ST N	City: CENTRALIA	Zip Code: 98531	County: Lewis		
Latitude: 46.74541	Longitude: -122.95366	WRIA: 23	Legislative District: 20	Congressional District: 3	TRS: 15N 2W 32

DETAIL					
Status: Cleanup Started	NFA Received?	No	Is PSI site?	No	
Statute: MTCA	NFA Date:	N/A	Current VCP?	No	Past VCP? No
Site Rank: N/A	NFA Reason:	N/A	Brownfield?	No	
Site Manager: Southwest Region	Responsible Unit:	Southwest	Active Institutional Control?	No	

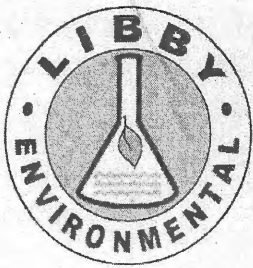
CLEANUP UNITS					
Cleanup Unit Name	Unit Type	Unit Status	Resp Unit	Unit Manager	Current Process
PEARL STREET MARKET	Upland	Cleanup Started	SW	Southwest Region	Independent Action

ACTIVE INSTITUTIONAL CONTROLS						
Instrument Type	Restriction Media	Restrictions/Requirements	Date	Recording Number	Recording County	Tax Parcel
There are no current Institutional Controls in effect for this site.						

AFFECTED MEDIA & CONTAMINANTS						
MEDIA						
Contaminant	Soil	Groundwater	Surface Water	Sediment	Air	Bedrock
Petroleum-Other	C	C				
Key: B - Below Cleanup Level C - Confirmed Above Cleanup Level RA - Remediated-Above S - Suspected R - Remediated RB - Remediated-Below						

SITE ACTIVITIES			
Activity	Status	Start Date	End Date/Completion Date
LUST - Notification	Completed		4/24/1995
Site Discovery/Release Report Received	Completed		4/24/1995
LUST - Report Received	Completed		6/20/1995
Initial Investigation / Federal Preliminary Assessment	Completed		9/30/2011
Early Notice Letter(s)	Completed		9/30/2011

Appendix B



Libby Environmental, Inc.

4139 Libby Road NE • Olympia, WA 98506-2518

April 2, 2019

NES, Inc.
Kevin Wilkerson
P.O. Box 1583
Sumner, WA 98390

Dear Mr. Wilkerson:

Please find enclosed the analytical data report for the Pearl Street Market Project located in Centralia, Washington.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. The sample(s) will be disposed of in 30 days unless we are contacted to arrange long term storage.

Libby Environmental, Inc. appreciates the opportunity to have provided analytical services for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Sherry L. Chilcutt
Senior Chemist
Libby Environmental, Inc.

Libby Environmental, Inc.

PEARL STREET MARKET PROJECT
NES, Inc.
Centralia, Washington
Libby Project # L190401-4
Client Project # 2019-171

4139 Libby Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

Analyses of Gasoline (NWTPH-Gx) & BTEX (EPA Method 8260C) in Soil

Sample Number	Date Analyzed	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Gasoline (mg/kg)	Surrogate Recovery (%)
Method Blank	4/1/19	nd	nd	nd	nd	nd	103
LCS	4/1/19	83%	124%				95
1SB-N	4/1/19	nd	nd	nd	nd	nd	114
3SB-W	4/1/19	nd	nd	nd	nd	nd	90
4SB-PL	4/1/19	nd	nd	nd	nd	nd	91
5SB-E	4/1/19	nd	nd	nd	nd	nd	91
5SB-E Dup	4/1/19	nd	nd	nd	nd	nd	91
L190329-4 MS	4/1/19	110%	87%				111
L190329-4 MSD	4/1/19	111%	130%				114

Practical Quantitation Limit	0.02	0.10	0.05	0.15	10
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"nd" Indicates not detected at the listed detection limits.

"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Toluene-d8): 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

PEARL STREET MARKET PROJECT

NES, Inc.

Centralia, Washington

Libby Project # L190401-4

Client Project # 2019-171

4139 Libby Road NE

Olympia, WA 98506

Phone: (360) 352-2110

FAX: (360) 352-4154

Email: libbyenv@gmail.com

Analyses of Total Lead in Soil by EPA 7010 Series

Sample Number	Date Analyzed	Lead (mg/kg)
Method Blank	4/1/19	nd
1SB-N	4/1/19	48
1SB-N Dup	4/1/19	49
3SB-W	4/1/19	12
4SB-PL	4/1/19	7.9
5SB-E	4/1/19	nd
Practical Quantitation Limit		5.0
"nd" Indicates not detected at the listed detection limits.		
"int" Indicates that interference prevents determination.		

ANALYSES PERFORMED BY: Dirk Peterson

Libby Environmental, Inc.

PEARL STREET MARKET PROJECT

NES, Inc.

Centralia, Washington

Libby Project # L190401-4

Client Project # 2019-171

4139 Libby Road NE

Olympia, WA 98506

Phone: (360) 352-2110

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Email: libbyenv@gmail.com

QA/QC for Total Lead in Soil by EPA 7010 Series

Sample Number	Date Analyzed	Lead (% Recovery)
LCS	4/1/19	100%
1SB-N MS	4/1/19	104%
1SB-N MSD	4/1/19	100%
RPD	4/1/19	4%

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 75%-125%

ACCEPTABLE RPD IS 20%

ANALYSES PERFORMED BY: Dirk Peterson

Libby Environmental, Inc.

PEARL STREET MARKET PROJECT

NES, Inc.

Centralia, Washington

Libby Project # L190401-4

Client Project # 2019-171

4139 Libby Road NE

Olympia, WA 98506

Phone: (360) 352-2110

FAX: (360) 352-4154

Email: libbyenv@gmail.com

Analyses of Gasoline (NWTPH-Gx) & BTEX (EPA Method 8260C) in Water

Sample Number	Date Analyzed	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Gasoline (µg/L)	Surrogate Recovery (%)
Method Blank	4/1/19	nd	nd	nd	nd	nd	103
LCS	4/1/19	83%	124%				95
2SB-N-W	4/1/19	nd	nd	nd	nd	nd	115
Practical Quantitation Limit		1.0	2.0	1.0	2.0	100	

"nd" Indicates not detected at the listed detection limits.

"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Toluene-d8): 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

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Olympia, WA 98506

Phone: (360) 352-2110

FAX: (360) 352-4154

Email: libbyenv@gmail.com

PEARL STREET MARKET PROJECT

NES, Inc.

Libby Project # L190401-4

Date Received 4/1/2019

Time Received 1:52 PM

Received By MH

Sample Receipt Checklist

Chain of Custody

1. Is the Chain of Custody is complete? ☒ Yes ☐ No
2. How was the sample delivered? ☒ Hand Delivered ☐ Picked Up ☐ Shipped

Log In

3. Cooler or Shipping Container is present. ☒ Yes ☐ No ☐ N/A
4. Cooler or Shipping Container is in good condition. ☒ Yes ☐ No ☐ N/A
5. Cooler or Shipping Container has Custody Seals present. ☐ Yes ☒ No ☐ N/A
6. Was an attempt made to cool the samples? ☐ Yes ☒ No ☐ N/A
7. Temperature of cooler (0°C to 8°C recommended) 23.0 °C
8. Temperature of sample(s) (0°C to 8°C recommended) 20.0 °C
9. Did all containers arrive in good condition (unbroken)? ☒ Yes ☐ No
10. Is it clear what analyses were requested? ☒ Yes ☐ No
11. Did container labels match Chain of Custody? ☒ Yes ☐ No
12. Are matrices correctly identified on Chain of Custody? ☒ Yes ☐ No
13. Are correct containers used for the analysis indicated? ☐ Yes ☒ No
14. Is there sufficient sample volume for indicated analysis? ☐ Yes ☒ No
15. Were all containers properly preserved per each analysis? ☒ Yes ☐ No
16. Were VOA vials collected correctly (no headspace)? ☐ Yes ☒ No ☐ N/A
17. Were all holding times able to be met? ☒ Yes ☐ No

Discrepancies/ Notes

18. Was client notified of all discrepancies? ☒ Yes ☐ No ☐ N/A

Person Notified: Kevin

Date: 4/1/2019

By Whom: Melissa Harrington

Via: Phone

Regarding: Sample volume

19. Comments. No VOAs for 2SB+N-W.

Client says to just run Gx.BTEX for 2SB-N-W.

Libby Environmental, Inc.

Chain of Custody Record

www.LibbyEnvironmental.com

4139 Libby Road NE
Olympia, WA 98506

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

Date: 4/1/19 Page: 1 of 1

Client: RTZ, Inc.

Project Manager: Kevin J. Dumas

Address: PO Box 155

Project Name: Penn State W. Green

City: Yonkers State: NY Zip: 10551


Location: 217 N. Route 5 City, State: Yonkers, NY

Phone: 877-241-4013 Fax: 800-576-9091

Collector: Kevin J. Dumas Date of Collection: 4/1/19

Client Project # 2019-171

Email: Kevin.Dumas@libbyenv.com

																		
Sample Number	Depth	Time	Sample Type	Container Type	VOC 8280	NWTPH-Gx	BTEX 8021	NWTPH-HCID	NWTPH-Dx	NWTPH-DwDx	c PAH 8270	PAH 8270	Semi Vol 8270	PCB 8082	MTCA 5 Metals	RCRA 8 Metals	Field Notes	
1 25B-N	1'	11:55	Soil															
2 25B-NW	1'	12:00	Soil															*only run Gx, BTEX
3 25B-N	1'	11:53	Soil															
4 25B-N	1'	12:00	Soil															
5 25B-N	1'	12:00	Soil															
6																		
7																		
8																		
9																		
10																		
11																		
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13																		
14																		
15																		
16																		
17																		

Relinquished by: <u>[Signature]</u>	Date / Time: <u>4/1/19 13:52</u>	Received by: <u>[Signature]</u>	Date / Time: <u>4/1/19 13:52</u>	Sample Receipt Good Condition? Y N Temp. °C Seals Intact? Y N N/A Total Number of Containers: <u> </u>		Remarks: <u>Sample 25B-NW - only run Gx, BTEX per Kevin, 4/1/19 via phone</u> TAT: <u>24HR 48HR 5-DAY</u>
Relinquished by: <u>[Signature]</u>	Date / Time: <u>4/1/19 13:52</u>	Received by: <u>[Signature]</u>	Date / Time: <u>4/1/19 13:52</u>			
Relinquished by: <u>[Signature]</u>	Date / Time: <u>4/1/19 13:52</u>	Received by: <u>[Signature]</u>	Date / Time: <u>4/1/19 13:52</u>			

LEGAL ACTION CLAUSE: In the event of default of payment and/or failure to pay, Client agrees to pay the costs of collection including court costs and reasonable attorney fees to be determined by a court of law.

Distribution: White - Lab, Yellow - File, Pink - Originator