

Appendix A



# CHAIN of CUSTODY

## SPECTRA Laboratories

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

PAGE 1 of 1

STANDARD

RUSH



CLIENT: NES, Inc

ADDRESS: POB 1583 Sumner, WA. 98390

ADDRESS CHANGE ☐

PROJECT: MLK GAS AND GROCERY

CONTACT: Kevin Wilkerson

PHONE: 253-241-6213

FAX: 360-872-0699

e-MAIL: nesinc@hotmail.com

Prefer FAX or e-MAIL ☒

PURCHASE ORDER #

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	MATRIX
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### NUMBER OF CONTAINERS

HYDROCARBONS						ORGANICS						METALS						OTHER					
NWTPH-HCID						BTEX						TOTAL METALS RCRA 8						PH 9040/9045					
BTEX						BTEX/NWTPH-G						TOTAL METALS (SPECIFY)						TX/TOX 9076					
NWTPH-G						NWTPH-Dx						TCLP METALS RCRA 8						TURBIDITY					
1664 SGT-HEM (TPH)						1664 HEM (FOG)						TCLP METALS (SPECIFY)						FLASH POINT					
8260/624 VOA						8260 CHLOR SOLVENTS												BOD					
8270/625 SEMI VOA						8270 PAH/PNA												SOLIDS (SPECIFY)					
8082/608 PCB																		TDS					

1	1AW-5'	01/03/14	08:40	Soil	1	X																	
2	1AW-14'	"	09:12	"	1		X																
3	2AE-14'	"	09:52	"	1		X																
4	3N-5'	"	10:35	"	1	X																	
5																							
6																							
7																							
8																							
9																							
0																							

SPECIAL INSTRUCTIONS/COMMENTS:

SIGNATURE

PRINTED NAME

COMPANY

DATE

TIME

RELINQUISHED BY

Kevin Wilkerson

NES, Inc.

01/03/14

11:20 AM

RECEIVED BY

*Quarles April Jessica Holt*

*Spectra*

*1/3/14*

*11:26*

RELINQUISHED BY

RECEIVED BY

RETURN SAMPLES

DISPOSE SAMPLES

Payment Terms: Net 30 days. Past due accounts subject to 1 1/2 % per month interest. Customer agrees to pay all costs of collection including reasonable attorney's fees and all other costs of collection regardless of whether suit is filed in Pierce Co. WA versus Spectra Laboratories, Inc.



**Table 740-1**  
**Method A Soil Cleanup Levels**  
**for Unrestricted Land Uses.<sup>a</sup>**

Hazardous Substance	CAS Number	Cleanup Level
Arsenic	7440-38-2	20 mg/kg <sup>b</sup>
Benzene	71-43-2	0.03 mg/kg <sup>c</sup>
Benzo(a)pyrene	50-32-8	0.1 mg/kg <sup>d</sup>
Cadmium	7440-43-9	2 mg/kg <sup>e</sup>
Chromium		
Chromium VI	18540-29-9	19 mg/kg <sup>f1</sup>
Chromium III	16065-83-1	2,000 mg/kg <sup>f2</sup>
DDT	50-29-3	3 mg/kg <sup>g</sup>
Ethylbenzene	100-41-4	6 mg/kg <sup>h</sup>
Ethylene dibromide (EDB)	106-93-4	0.005 mg/kg <sup>i</sup>
Lead	7439-92-1	250 mg/kg <sup>j</sup>
Lindane	58-89-9	0.01 mg/kg <sup>k</sup>
Methylene chloride	75-09-2	0.02 mg/kg <sup>l</sup>
Mercury (inorganic)	7439-97-6	2 mg/kg <sup>m</sup>
MTBE	1634-04-4	0.1 mg/kg <sup>n</sup>
Naphthalenes	91-20-3	5 mg/kg <sup>o</sup>
PAHs (carcinogenic)		See benzo(a)pyrene <sup>d</sup>
PCB Mixtures		1 mg/kg <sup>p</sup>
Tetrachloroethylene	127-18-4	0.05 mg/kg <sup>q</sup>
Toluene	108-88-3	7 mg/kg <sup>r</sup>
Total Petroleum Hydrocarbons <sup>s</sup>		
[Note: Must also test for and meet cleanup levels for other petroleum components--see footnotes!]		
Gasoline Range Organics		
Gasoline mixtures without benzene and the total of ethyl benzene, toluene and xylene are less than 1% of the gasoline mixture		100 mg/kg
All other gasoline mixtures		30 mg/kg
Diesel Range Organics		
Heavy Oils		2,000 mg/kg
Mineral Oil		4,000 mg/kg
1,1,1 Trichloroethane	71-55-6	2 mg/kg <sup>t</sup>
Trichloroethylene	79-01-6	0.03 mg/kg <sup>u</sup>
Xylenes	1330-20-7	9 mg/kg <sup>v</sup>

## Footnotes:

- a Caution on misusing this table.** This table has been developed for specific purposes. It is intended to provide conservative cleanup levels for sites undergoing routine cleanup actions or for sites with relatively few hazardous substances, and the site qualifies under WAC 173-340-7491 for an exclusion from conducting a simplified or site-specific terrestrial ecological evaluation, or it can be demonstrated using a terrestrial ecological evaluation under WAC 173-340-7492 or 173-340-7493 that the values in this table are ecologically protective for the site. This table may not be appropriate for defining cleanup levels at other sites. For these reasons, the values in this table should not automatically be used to define cleanup levels that must be met for financial, real estate, insurance coverage or placement, or similar transactions or purposes. Exceedances of the values in this table do not necessarily mean the soil must be restored to these levels at a site. The level of restoration depends on the remedy selected under WAC 173-340-350 through 173-340-390.
- b Arsenic.** Cleanup level based on direct contact using Equation 740-2 and protection of ground water for drinking water use using the procedures in WAC 173-340-747(4), adjusted for natural background for soil.
- c Benzene.** Cleanup level based on protection of ground water for drinking water use, using the procedures in WAC 173-340-747(4) and (6).
- d Benzo(a)pyrene.** Cleanup level based on direct contact using Equation 740-2. If other carcinogenic PAHs are suspected of being present at the site, test for them and use this value as the total concentration that all carcinogenic PAHs must meet using the toxicity equivalency methodology in WAC 173-340-708(8).
- e Cadmium.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4), adjusted for the practical quantitation limit for soil.
- f1 Chromium VI.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).
- f2 Chromium III.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4). Chromium VI must also be tested for and the cleanup level met when present at a site.
- g DDT (dichlorodiphenyltrichloroethane).** Cleanup level based on direct contact using Equation 740-2.
- h Ethylbenzene.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).
- i Ethylene dibromide (1,2 dibromoethane or EDB).** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4) and adjusted for the practical quantitation limit for soil.
- j Lead.** Cleanup level based on preventing unacceptable blood lead levels.
- k Lindane.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4), adjusted for the practical quantitation limit.
- l Methylene chloride (dichloromethane).** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).
- m Mercury.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).
- n Methyl tertiary-butyl ether (MTBE).** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).
- o Naphthalenes.** Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4). This is a total value for naphthalene, 1-methyl naphthalene and 2-methyl naphthalene.
- p PCB Mixtures.** Cleanup level based on applicable federal law (40 C.F.R. 761.61). This is a total value for all PCBs.





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01/06/2014


Northwest Environmental Solutions, Inc  
PO Box 1583  
Sumner, WA 98390

Project: MLK Gas and Grocery  
Client ID: 1AW-5  
Sample Matrix: Soil  
Date Sampled: 01/03/2014  
Date Received: 01/03/2014  
Spectra Project: 2014010022  
Spectra Number: 1  
Rush

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
HCID- Gasoline	<20	mg/Kg	NWTPH-HCID
HCID-Diesel	<50	mg/Kg	NWTPH-HCID
HCID-Oil	<100	mg/Kg	NWTPH-HCID

<u>Surrogate</u>	<u>Recovery</u>	<u>Method</u>
4-Bromofluorobenzene	69	NWTPH-HCID
p-Terphenyl	103	NWTPH-HCID

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Steve Hibbs, Laboratory Manager  
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01/06/2014


Northwest Environmental Solutions, Inc  
PO Box 1583  
Sumner, WA 98390

Project: MLK Gas and Grocery  
Client ID: 1AW-14  
Sample Matrix: Soil  
Date Sampled: 01/03/2014  
Date Received: 01/03/2014  
Spectra Project: 2014010022  
Spectra Number: 2  
Rush

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
Gasoline	<5	mg/Kg	NWTPH-G
Benzene	<0.015	mg/Kg	SW846 8260C
Ethylbenzene	<0.015	mg/Kg	SW846 8260C
Methyl-tert-Butyl Ether	<0.015	mg/Kg	SW846 8260C
Toluene	<0.015	mg/Kg	SW846 8260C
Total Xylenes	<0.03	mg/Kg	SW846 8260C

<u>Surrogate</u>	<u>Recovery</u>	<u>Method</u>
Toluene-d8	100	NWTPH-G
4-Bromofluorobenzene	79	NWTPH-G

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Steve Hibbs, Laboratory Manager  
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01/06/2014


Northwest Environmental Solutions, Inc  
PO Box 1583  
Sumner, WA 98390

Project: MLK Gas and Grocery  
Client ID: 2AE-14  
Sample Matrix: Soil  
Date Sampled: 01/03/2014  
Date Received: 01/03/2014  
Spectra Project: 2014010022  
Spectra Number: 3  
Rush

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
Gasoline	6.2	mg/Kg	NWTPH-G
Benzene	0.038	mg/Kg	SW846 8260C
Ethylbenzene	0.021	mg/Kg	SW846 8260C
Methyl-tert-Butyl Ether	<0.015	mg/Kg	SW846 8260C
Toluene	0.097	mg/Kg	SW846 8260C
Total Xylenes	0.115	mg/Kg	SW846 8260C

<u>Surrogate</u>	<u>Recovery</u>	<u>Method</u>
4-Bromofluorobenzene	97	NWTPH-G
Toluene-d8	101	NWTPH-G

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Steve Hibbs, Laboratory Manager

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01/06/2014


Northwest Environmental Solutions, Inc  
PO Box 1583  
Sumner, WA 98390

Project: MLK Gas and Grocery  
Client ID: 3N-5  
Sample Matrix: Soil  
Date Sampled: 01/03/2014  
Date Received: 01/03/2014  
Spectra Project: 2014010022  
Spectra Number: 4  
Rush

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
HCID- Gasoline	<20	mg/Kg	NWTPH-HCID
HCID-Diesel	<50	mg/Kg	NWTPH-HCID
HCID-Oil	Present	mg/Kg	NWTPH-HCID

<u>Surrogate</u>	<u>Recovery</u>	<u>Method</u>
4-Bromofluorobenzene	58	NWTPH-HCID
p-Terphenyl	87	NWTPH-HCID

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January 6, 2014

Northwest Environmental Solutions, Inc.  
P.O. Box 1583  
Sumner, WA 98390


Sample Matrix: Water  
EPA Method: 624/8260C  
Spectra Project: 2014010022  
Date Analyzed: 1/3/2014  
Units: ug/L  
Applies to Spectra #'s: #2-3  
Spiked Sample 2014010006-1

## GCMS VOLATILE ORGANIC ANALYSIS

Matrix Spike/ Matrix Spike Duplicate Results

COMPOUND	SAMPLE RESULT	SPIKE AMOUNT	MS RESULT	MS %REC	MSD RESULT	MSD %REC	RPD
1,1-Dichloroethene	<1	10.00	12.23	122	12.81	128	5
Benzene	<1	10.00	11.52	115	11.57	116	0
Trichloroethene	<1	10.00	10.35	104	10.55	106	2
Toluene	2.5	10.00	13.10	107	13.02	106	1
Chlorobenzene	<1	10.00	10.93	109	10.79	108	1
(Results after dilution)							

Surrogates	MS	MSD	MB	Method Blank	ug/L
				Benzene	<1
				Toluene	<1
Toluene-d8	94	94	109	Ethylbenzene	<1
4-Bromofluorobenzene	86	87	69	Total Xylenes	<2
				MTBE	<1



Steven G. Hibbs  
Laboratory Manager