

September 14, 2001

Mr. Ron Kline
Northwest Wire Rope & Equipment
2301 Lincoln Avenue
Tacoma, Washington 98421

Re: Ground Water Sampling and Well Decommissioning Letter Report
Northwest Wire Rope & Equipment
2301 Lincoln Avenue
Tacoma, Washington

EPI Project No. 33501.1

Dear Mr. Kline:

Environmental Partners, Inc. (EPI) is pleased to present this Letter Report documenting ground water sampling and well decommissioning activities at the Northwest Wire Rope & Equipment facility located at 2301 Lincoln Avenue in Tacoma, Washington (subject property). The general location of the subject property is indicated on Figure 1.

The purpose of the field activities performed at the subject property and documented in this letter report is to gather sufficient information in order to obtain an unrestricted No Further Action (NFA) designation for the subject property from the Washington State Department of Ecology (Ecology) and the Tacoma-Pierce County Health Department (TPHCD) for a historic release from a gasoline underground storage tank (UST) removed from the subject property in 1991.

#### **GROUND WATER SAMPLING**

On May 9, 2001, EPI mobilized to the site to collect ground water samples from the three existing ground water monitoring wells (i.e., MW-1, MW-2, and MW-3). The locations of each monitoring well are presented on Figure 2.

Upon opening the monument to MW-3, a thick tan colored liquid with a heavy petroleum odor was observed to be present in the monument surrounding the monitoring well and floating on the water table inside the well casing. Based upon the observation of oily material at the wellhead, it appeared that the observed oily substance originated from a surface release rather than from a subsurface source of contamination. A surface release was all the more likely since at no time in the past had free phase hydrocarbons or oil been observed in this well.

Mr. Kline – Northwest Wire Rope & Equipment EPI Project No. 33501.1 September 14, 2001

Using a disposable bailer, the oily material was measured to be approximately 1.5 to 2 feet thick. Based on these observations, a ground water sample was not collected from this well during this sampling event in anticipation of further characterization and remediation.

Ground water samples were collected from MW-1 and MW-2 using a peristaltic pump and dedicated tubing. Prior to sampling, the depth to ground water was measured in each of the wells using an electronic water level meter accurate to 0.01 feet. After purging approximately 1 well volume of water from each well, ground water samples were pumped directly into appropriate sample containers at a flow rate of less than 100 milliliters/minute. Ground water samples were pumped directly into containers appropriate for the intended analyses.

Ground water samples were submitted for the following analyses:

- Gasoline-range petroleum hydrocarbons (GRPH) using the Northwest Total Petroleum Hydrocarbons as Gasoline (NWTPH-Gx) Method,
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8021B, and
- Dissolved lead using EPA Method 7421.

Ground water samples collected for dissolved lead analysis were field filtered using a disposable 0.45 micron filter and placed in containers preserved with nitric acid.

Immediately upon collection, all ground water samples were labeled and placed in an iced cooler pending submittal to CCI Analytical Laboratories, Inc. (CCI) in Everett Washington. All samples were handled and transported under standard chain-of-custody protocols.

In addition to the ground water samples, EPI collected a sample from the petroleum product observed in MW-3 for characterization. The product sample was submitted for the following analysis:

- Diesel- and higher-range petroleum hydrocarbons (DRPH and HRPH) using the Northwest Total Petroleum Hydrocarbons as Diesel-extended (NWTPH-Dx) Method,
- · Volatile organic compounds (VOCs) by EPA Method 8260; and
- Polychlorinated biphenols (PCBs) by EPA Method 8082 Modified.

#### **Findings**

Ground water was encountered at the subject property at depths ranging from 7.15 to 8.25 feet below grade. Two ground water samples and one product sample were submitted for a range of laboratory analyses indicated above. Final laboratory analytical reports are presented in Attachment A.

Neither gasoline-range petroleum hydrocarbons, BTEX, nor dissolved lead were detected above the method detection limit in either of the ground water samples collected from MW-1 and MW-2.

Trace concentrations of compounds typically found in gasoline blends were detected in the water/product sample from MW-3. The detected compounds were n-propyl benzene at a concentration of 10 micrograms per liter (µg/L), s-butyl benzene at a concentration of 19 µg/L, and n-

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butyl benzene at a concentration of 35  $\mu$ g/L. These compounds are likely remnants of the natural biodegradation of gasoline, and are not individually regulated under the Model Toxics Control Act (MTCA).

PCBs were not detected in the product sample collected from MW-3.

According to CCI analytical report, the chromatogram indicates that the sample collected from MW-3 contains products which are "likely diesel and light lube oil".

#### PRODUCT REMOVAL

Upon discovering the petroleum product in MW-3, EPI immediately scheduled a vacuum truck to remove the product from the well. CEcon Corporation (CEcon) mobilized a vacuum truck to the subject property on May 11, 2001. After approximately 4 hours of vacuum extraction, approximately 720 gallons of oily water had been removed from MW-3.

The oily water was transported by CEcon to Emerald Services, Inc. located in Seattle, Washington for recycling. A Bill of Lading and Gallonage Report is included with this report as Attachment B.

#### SUBSURFACE INVESTIGATION

On May 31, 2001, EPI mobilized to the site to perform a subsurface investigation at the subject property in order to characterize the extent of impacts to the surrounding soil, from the release of hydrocarbons into monitoring well MW-3.

#### Methodology

Monitoring well MW-3 was screened installed from approximately 3 feet below grade to 13 feet below grade. Ground water at the subject property is generally between about 7 and 8 feet below grade. Product thickness in monitoring well MW-3 was approximately 1.5 to 2 feet.

A total of 9 soil borings (NWWRB-1 through NWWRB-9) were advanced in the vicinity of ground water monitoring well MW-3 using standard direct-push technology (DPT) sampling techniques (see Figure 3). Soil borings NWWRB-1 and NWWRB-2 were installed within a 1.5 foot radius of monitoring well MW-3. The locations of all soil borings are indicated on Figure 3. Each boring was advanced to a depth of 10 feet below grade.

During drilling, soil samples were collected continuously to the total depth of exploration. Field screening was performed with special attention being given to the potential depth interval of the product in MW-3 (i.e., 6.5 to 9.5 feet below grade). Field screening consisted of screening for the presence of volatile compounds using a photoionization detector (PID) and for separate-phase hydrocarbons using sheen testing. The soil conditions encountered during drilling were described using the Unified Soil Classification System (USCS) visual-manual procedures (ASTM 2488D). The results of field screening and the soil conditions encountered during drilling are presented on soil borings logs in Attachment C.

Mr. Kline – Northwest Wire Rope & Equipment EPI Project No. 33501.1 September 14, 2001

Soil samples were selected for laboratory analysis based upon the results of field screening. A total of 8 soil samples were submitted for analysis using the NWTPH-Dx method with silica gel cleanup.

In addition to the ground water samples collected on May 9, 2001, additional ground water samples were collected from monitoring well MW-1 and MW-2 and from a temporary 1-inch well installed near MW-3 (i.e., NWWRB-7). All ground water samples collected at the subject property were collected using a peristaltic pump and dedicated tubing.

Each of the three ground water sample was submitted for analysis of DRPH and HRPH using the NWTPH-Dx method. Additionally, the ground water sample collected from soil boring NWWRB-7 was submitted for analysis of GRPH using the NWTPH-Gx method, BTEX, and dissolved lead.

Immediately upon collection, all soil and ground water samples were labeled and placed in an iced cooler pending submittal to the analytical laboratory. All samples were handled and transported under standard chain-of-custody protocols.

#### **Findings**

#### Soil

A total of 8 soil samples were submitted for laboratory analyses of NWTPH-Dx. Final laboratory analytical reports are presented in Attachment A.

Neither DRPH or HRPH were detected in any of the soil samples submitted for analysis.

#### **Ground Water**

A total of three ground water samples were submitted for a range of laboratory analyses. Final laboratory analytical reports are presented in Attachment A.

Neither DRPH or HRPH were detected in any of the three ground water samples above the detection limit of the method used.

Neither GRPH nor dissolved lead were detected above the detection limit of the method used in ground water sample NWWR-7.

Benzene was detected in ground water sample NWWR-7 at a concentration of 4  $\mu$ g/L. The detected concentration of benzene is below the MTCA Method A ground water cleanup level of 5.0  $\mu$ g/L.

Toluene, ethylbenzene, and total xylenes were not detected above the detection limit of the method used in ground water sample NWWR-7.

#### WELL DECOMMISSIONNING

Upon confirming that there were no significant subsurface impacts as a result from the release to monitoring well MW-3, EPI scheduled with CEcon to remove monitoring well MW-3. CEcon used a rubber-tire backhoe to excavate MW-3 and the soils immediately surrounding the well. The total depth of the excavation was approximately 14 feet below grade. The sidewalls of the excavation extended beyond the horizontal distance of soil borings NWWRB-1 and NWWRB-2 (see Photographs in Attachment D). This was deemed sufficient since there were no field or analytical indication of impacts in these boring locations. The excavated area is indicated on Figure 3.

A total of 6.53 tons of excavated soil were taken to TPS Technologies in Tacoma, Washington for thermal desorption treatment. A copy of the disposal paperwork is included with this report as Attachment E.

The excavation was backfilled using a self-compacting fill material (i.e., crushed rock) and then patched using hot-mix asphalt.

#### CONCLUSIONS

The following conclusions are supported by the findings of the field activities documented in this report:

- Ground water at the subject property is in compliance with MTCA Method A ground water cleanup levels for all identified contaminants of concern.
- An apparent release of an oily/diesel product to a monitoring well (MW-3) at the subject property was discovered during a routine ground water sampling event. Based on the results of a subsurface investigation including soil and ground water sampling, there does not appear to have been any significant subsurface impacts as a result from the release to MW-3. Remedial actions including ground water extraction and soil excavation have fully
  - 3. Remedial actions including ground water extraction and soil excavation have fully addressed any potential environmental impacts resulting from this release.

It has been a pleasure assisting you on this project. If you have any questions, do not hesitate to call me at (425) 889-4747.

Sincerely,

Eric Koltes

Project Manager

Mr. Kline – Northwest Wire Rope & Equipment EPI Project No. 33501.1 September 14, 2001

#### **FIGURES**

Figure 1 - General Vicinity Map

Figure 2 - Site Representation Showing Monitoring Well Locations

Figure 3 - Area of Investigation with Excavation Area

#### **ATTACHMENTS**

Attachment A - Analytical Laboratory Reports

Attachment B - Emerald Services, Inc. Bill of Lading and Gallonage Report

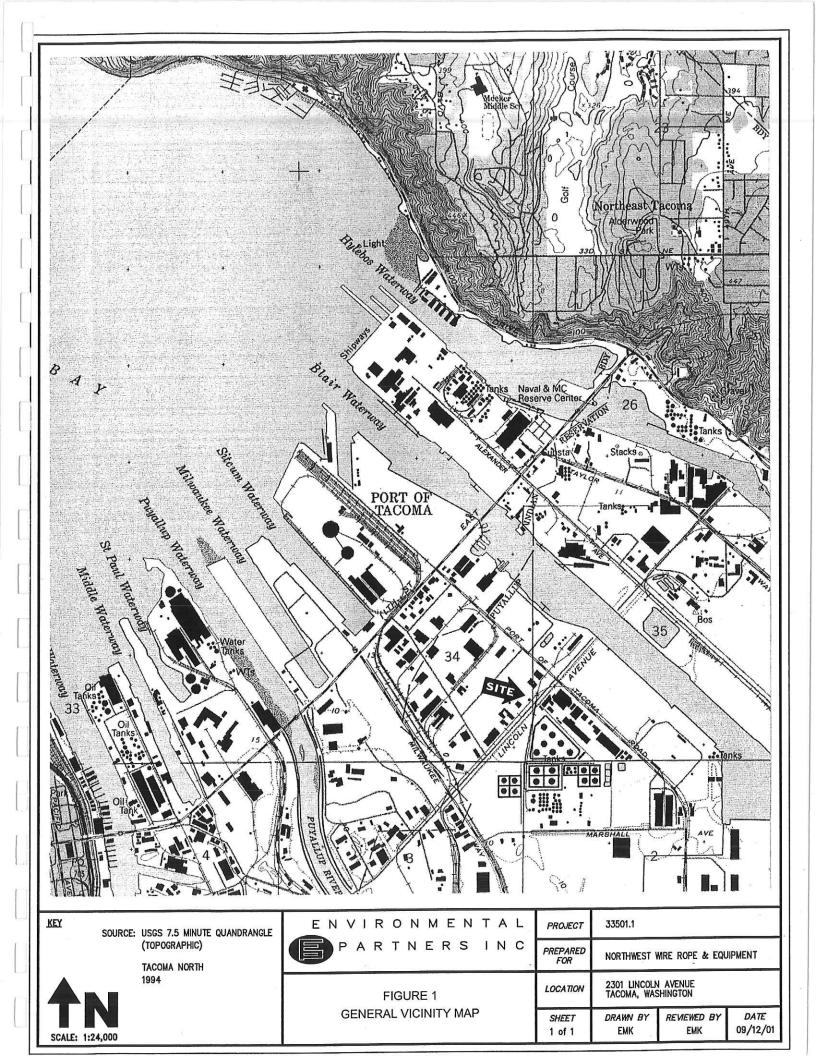
Attachment C - Soil Boring Logs

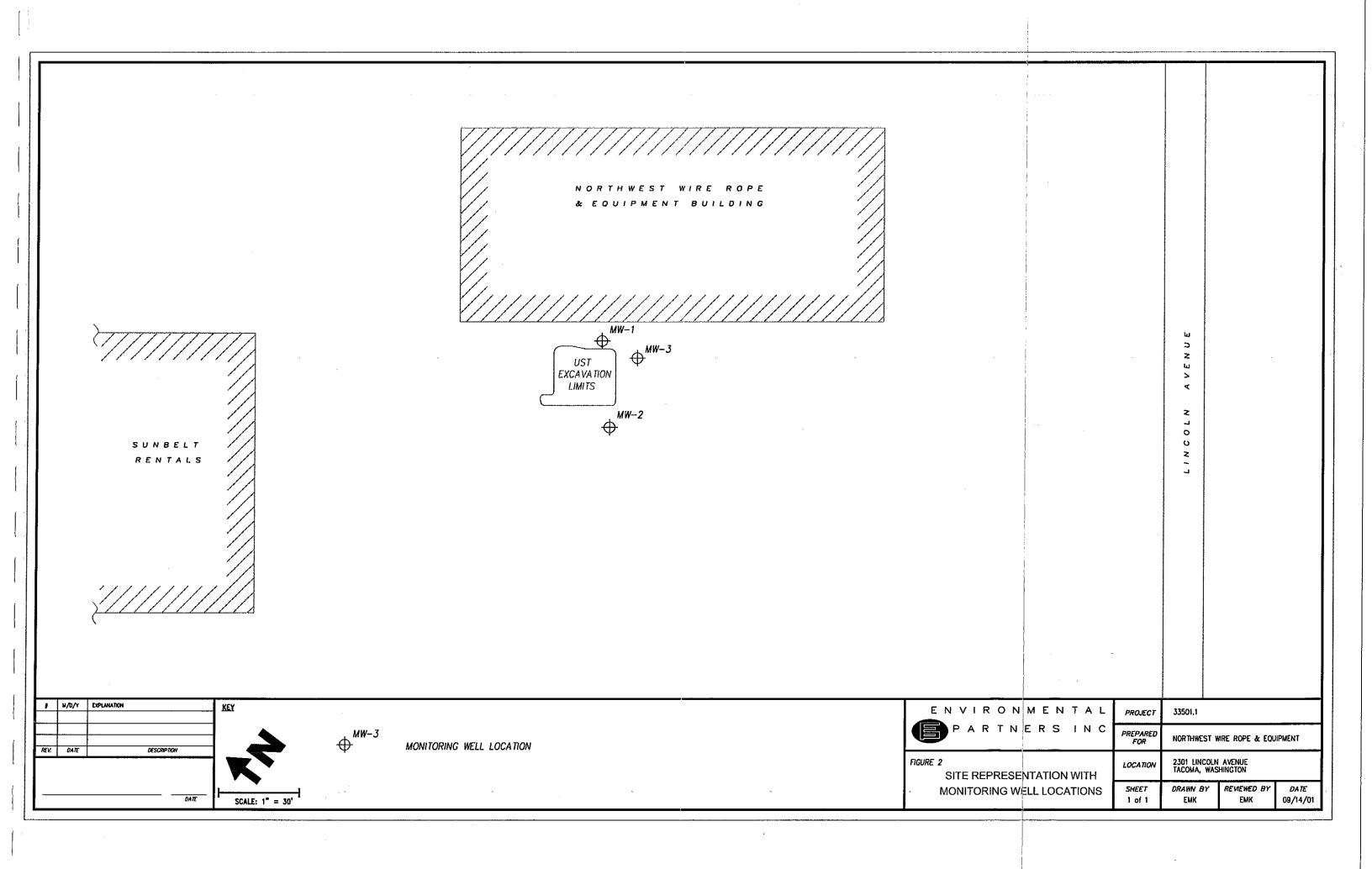
Attachment D - Photographs

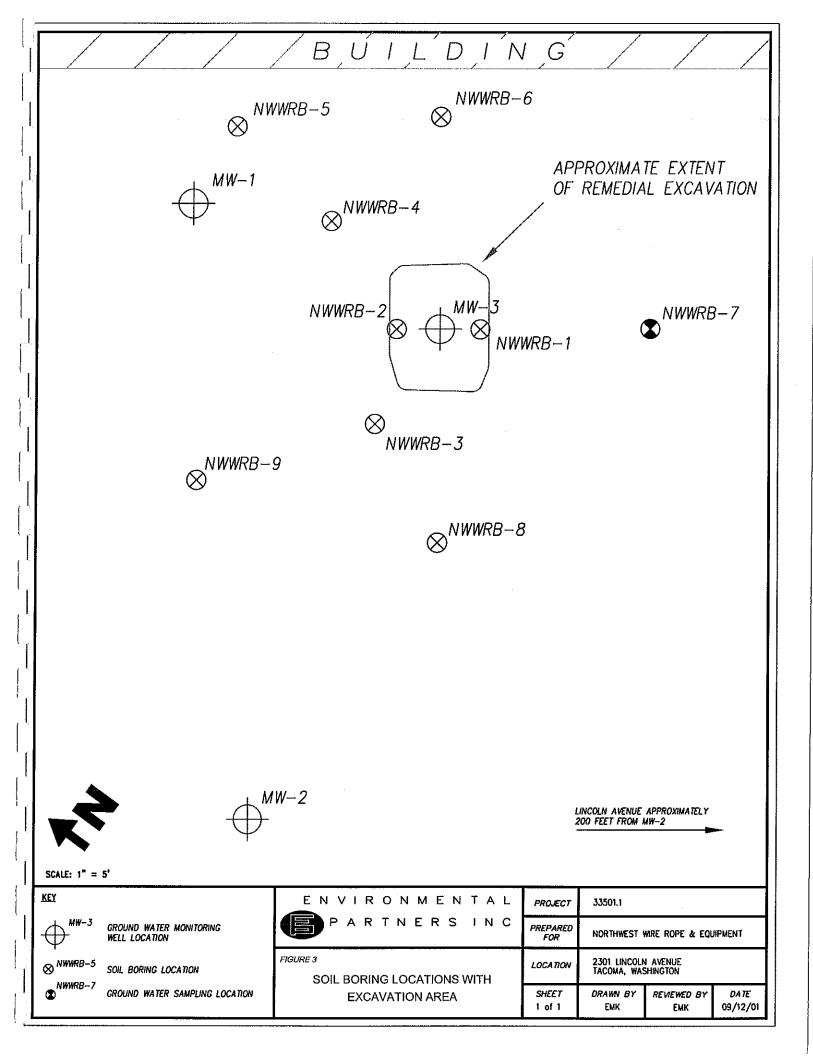
Attachment E - TPS Technologies, Inc. Disposal Paperwork

QR I

TRT







Attachment A



CLIENT:

ENVIRONMENTAL PARTNERS, INC.

10940 NE 33RD PLACE, SUITE 110

BELLEVUE, WA 98004

DATE:

5/16/01

CCIL JOB #: CCIL SAMPLE #:

105043

DATE RECEIVED:

5/9/01

WDOE ACCREDITATION #:

C142

CLIENT CONTACT: ERIC KOLTES

CLIENT PROJECT ID:

33501.0

CLIENT SAMPLE ID:

MW-1

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ANALYTE	МЕТНОО	RESULTS	UNITS"	ACTION	ANALYSIS DATE	ANALYSIS By
TPH-VOLATILE RANGE	NWTPH-GX	ND	UG/L		5/11/01	LAH
BENZENE TOLUENE ETHYLBENZENE XYLENES	EPA-8021 EPA-8021 EPA-8021 EPA-8021	ND(<1) ND(<1) ND(<1) ND(<3)	UG/L UG/L UG/L UG/L	5 UG/L 40 UG/L 30 UG/L 20 UG/L	5/11/01 5/11/01 5/11/01 5/11/01	LAH LAH LAH LAH
LEAD	EPA-7421	ND(<0.004)	MG/L		5/1 <i>4/</i> 01	LMH

APPROVED BY:

<sup>&</sup>quot;'ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS. GASOUNE(VOLATILE RANGE) REPORTING LIMIT IS 50 UG/L

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

<sup>-</sup> ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY.



CLIENT: ENVIRONMENTAL PARTNERS, INC.

10940 NE 33RD PLACE, SUITE 110

BELLEVUE, WA 98004

DATE: 9/12/01

CCIL JOB #: 10

105043

CCIL SAMPLE #:

2000

DATE RECEIVED:

5/9/01

WDOE ACCREDITATION #:

C142

CLIENT CONTACT:

**ERIC KOLTES** 

CLIENT PROJECT ID:

33501.0

CLIENT SAMPLE ID:

MW-3

DEDOD.

REPORT AMENDED 5/18/01 TO ADD ADDITIONAL PARAMETER

#### REPORT AMENDED TO INCLUDE REVISED SAMPLE ID

				ACTION	ANALYSIS	ANALYSIS
ANALYTE	<b>METHOD</b>	RESULTS*	UNITS**	<b>FEAEF</b> ***	DATE	ВҮ
DICHLORODIFLUOROMETHANE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
CHLOROMETHANE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
VINYL CHLORIDE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
BROMOMETHANE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
CHLOROETHANE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
TRICHLOROFLUOROMETHANE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
ACETONE	EPA-8260A	ND(<50)	UG/L		5/10/01	RAL
1,1-DICHLOROETHENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
METHYLENE CHLORIDE	EPA-8260A	ND(<25)	UG/L	· ·	5/10/01	RAL
ACRYLONITRILE	EPA-8260A	ND(<50)	UG/L		5/10/01	RAL
METHYL T-BUTYL ETHER	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
TRANS-1,2-DICHLOROETHENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
1,1-DICHLOROETHANE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
2-BUTANONE	EPA-8260A	ND(<50)	UG/L		5/10/01	RAL
CIS-1,2-DICHLOROETHENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
2,2-DICHLOROPROPANE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
BROMOCHLOROMETHANE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
CHLOROFORM	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
1,1,1-TRICHLOROETHANE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
1,1-DICHLOROPROPENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
CARBON TETRACHLORIDE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
1,2-DICHLOROETHANE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
BENZENE	EPA-8260A	ND(<10)	UG/L	•	5/10/01	RAL
TRICHLOROETHENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
1,2-DICHLOROPROPANE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
DIBROMOMETHANE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
BROMODICHLOROMETHANE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
TRANS-1,3-DICHLOROPROPENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
4-METHYL-2-PENTANONE	EPA-8260A	ND(<50)	UG/L		5/10/01	RAL
TOLUENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
CIS-1,3-DICHLOROPROPENE .	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL

Page 1

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059



CLIENT: ENVIRONMENTAL PARTNERS, INC.

10940 NE 33RD PLACE, SUITE 110

BELLEVUE, WA 98004

DATE: 9/12/01

CCIL JOB #: 105043

CCIL SAMPLE #:

DATE RECEIVED:

5/9/01

WDOE ACCREDITATION #:

C142

CLIENT CONTACT:

ERIC KOLTES

CLIENT PROJECT ID:

33501.0

CLIENT SAMPLE ID:

MW-3

REPORT AMENDED 5/18/01 TO ADD ADDITIONAL PARAMETER

REPORT AMENDED TO INCLUDE REVISED SAMPLE ID

	DATA	ESULTS	A Comment		did the draw	and the same of the
				ACTION	ANALYSIS	ANALYSIS
ANALYTE	метноо	RESULTS*	UNITS**	LEVEL***	DATE	BY
1,1,2-TRICHLOROETHANE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
2-HEXANONE	EPA-8260A	ND(<50)	UG/L -		5/10/01	RAL
1,3-DICHLOROPROPANE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
TETRACHLOROETHYLENE .	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
DIBROMOCHLOROMETHANE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
1,2-DIBROMOETHANE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
CHLOROBENZENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
1,1,1,2-TETRACHLOROETHANE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
ETHYLBENZENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
M+P XYLENE	EPA-8260A	ND(<20)	UG/L		5/10/01	RAL
STYRENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
O-XYLENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
BROMOFORM	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
ISOPROPYLBENZENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
1,1,2,2-TETRACHLOROETHANE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
1,2,3-TRICHLOROPROPANE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL.
BROMOBENZENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
N-PROPYL BENZENE	EPA-8260A	10	UG/L		5/10/01	RAL
2-CHLOROTOLUENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
1,3,5-TRIMETHYLBENZENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
4-CHLOROTOLUENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
T-BUTYL BENZENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
1,2,4-TRIMETHYL BENZENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
S-BUTYL BENZENE	EPA-8260A	<b>19</b>	UG/L		5/10/01	RAL
P-ISOPROPYLTOLUENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
1,3 DICHLOROBENZENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
1,4-DICHLOROBENZENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
N-BUTYLBENZENE	EPA-8260A	35	UG/L		5/10/01	RAL
1,2-DICHLOROBENZENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL
1,2-DIBROMO 3-CHLOROPROPANE	EPA-8260A	ND(<50)	UG/L		5/10/01	RAL
1,2,4-TRICHLOROBENZENE	EPA-8260A	ND(<10)	UG/L		5/10/01	RAL



CLIENT: ENVIRONMENTAL PARTNERS, INC. DATE: 9/12/01

10940 NE 33RD PLACE, SUITE 110

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ERIC KOLTES

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CLIENT PROJECT ID:

33501.0

CLIENT SAMPLE ID:

MW-3

REPORT AMENDED 5/18/01 TO ADD ADDITIONAL PARAMETER

#### DATA RESULTS ACTION ANALYSIS **ANALYSIS** ANALYTE METHOD RESULTS\* UNITS\*X **LEVEL×××** DATE ÞΥ HEXACHLORO1,3-BUTADIENE EPA-8260A ND(<10) UG/L 5/10/01 RAL NAPHTHALENE EPA-8260A ND(<10) UG/L 5/10/01 RAL 1,2,3-TRICHLOROBENZENE EPA-8260A ND(<10) UG/L 5/10/01 RAL TPH-SEMIVOLATILE RANGE SCREEN GC/FID SEE NOTE KAS 5/14/01 PCB-1016 **EPA-8082 MOD** ND(<20) MG/KG 5/18/01 LAH PCB-1221 EPA-8082 MOD ND(<20) MG/KG LAH 5/18/01 PCB-1232 EPA-8082 MOD ND(<20) MG/KG 5/18/01 LAH PCB-1242 **EPA-808Z MOD** ND(<20)MG/KG 5/18/01 LAH ND(<20) PCB-1248 **EPA-8082 MOD** MG/KG 5/18/01 LAH PCB-1254 **EPA-8082 MOD** ND(<20) MG/KG 5/18/01 LAH PCB-1260 **EPA-8082 MOD** ND(<20) MG/KG 5/18/01 LAH

NOTE:

CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCTS WHICH ARE LIKELY DIESEL AND A LIGHT LUBE

<sup>• &</sup>quot;NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DEFECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS CIVEN IN PARENTHESES.

<sup>\*\*</sup> UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION, WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY.



CLIENT: ENVIRO

ENVIRONMENTAL PARTNERS, INC. .

10940 NE 33RD PLACE, SUITE 110

BELLEVUE, WA 98004

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9/12/01

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WDOE ACCREDITATION #:

C142

CLIENT CONTACT:

**ERIC KOLTES** 

CLIENT PROJECT ID:

33501.0

CLIENT SAMPLE ID:

MW-2

### REPORT AMENDED TO INCLUDE REVISED SAMPLE ID

	D	NTA RESULT	5			
				ACTION	ANALYSIS	ANALYSIS
ANALYTE	METHOD	RESULTS*	<b>UNITS**</b>	reaet.	DATE	BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	UG/L		5/14/01	СМН
BENZENE	EPA-8021	ND(<1)	UG/L	5 UG/L	5/14/01	СМН
TOLUENE	EPA-8021	ND(<1)	UG/L	40 UG/L	5/14/01	CMH
ETHYLBENZENE	EPA-8021	ND(<1)	UG/L	30 UG/L	5/14/01	CMH
XYLENES	EPA-8021	ND(<3)	UG/L	20 UG/L	5/14/01	CMH
LEAD	EPA-7421	ND(<0.004)	MG/L		5/14/01	LMH

APPROVED BY: \_

<sup>&</sup>quot;"ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:

GASCILINE(VOLATILE RANGE) REPORTING LIMIT IS 50 UG/L

<sup>...</sup> UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY.



ENVIRONMENTAL PARTNERS, INC. CLIENT:

5/18/01 DATE:

10940 NE 33RD PLACE, SUITE 110

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BELLEVUE, WA 98004

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5/9/01

WDOE ACCREDITATION #:

C142

CLIENT CONTACT:

**ERIC KOLTES** 

CLIENT PROJECT ID:

33501.0

SURROGATE RECOVERY						
CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV			
105043-01	NWTPH-GX	. тғт	88			
105043-01	EPA-8021	TFT'	90			
105043-02	NWTPH-DX	C25	. 132			
105043-02	EPA-8260A	1,2-DCE-d4	97			
105043-02	EPA-8260A	TOLUENE-d8	96			
105043-02	EPA-8260A	4~BFB	99			
105043-02	EPA-8082 MOD	TCMX	*			
105043-02	EPA-8082 MOD	DBC	¥			
105043-03	NWTPH-GX	ु गहा	98			
105043-03	EPA-8021	TFT	134			

<sup>\*</sup> SURROGATE DILUTED OUT OF CALIBRATION RANGE



ENVIRONMENTAL PARTNERS, INC. CLIENT:

DATE:

6/7/01

10940 NE 33RD PLACE, SUITE 110

CCIL JOB #:

106007

BELLEVUE, WA 98004

CCIL SAMPLE #:

6/1/01

DATE RECEIVED: WDOE ACCREDITATION #:

C142

CLIENT CONTACT:

**ERIC KOLTES** 

CLIENT PROJECT ID:

33501.1

CLIENT SAMPLE ID:

NWWRB-1:5 5/31/01 0930

	DATA RESI	ILTS:				
				ACTION	ANALYSIS	ANALYSIS By
ANALYTE	METHOD	RESULTS*	UNITS*¥	FEAEFxxx	DATE	ы
TPH-SEMIVOLATILE RANGE	NWTPH-DX W/CLEANUP	СN	MG/KG		6/4/01	KA5

"NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS POLLOWS: DIESEL RANGE REPORTING LIMIT IS 25 MG/KG LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

- " UNITS FOR ALL NON LIQUIO SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS
- \*\*\* ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY.



CONTROL OF THE PROPERTY OF THE

CLIENT: ENVIRONMENTAL PARTNERS, INC.

10940 NE 33RD PLACE, SUITE 110

BELLEVUE, WA 98004

DATE: 6/7/01

CCIL JOB #: 106007

CCIL SAMPLE #:

7007

DATE RECEIVED:

6/1/01

WDOE ACCREDITATION #:

C142

CLIENT CONTACT:

ERIC KOLTES

CLIENT PROJECT ID:

33501.1

CLIENT SAMPLE ID:

NWWRB-2:5 5/31/01 1010

DATA RESULTS

Action analysis analysis

Method results\* units\*\* level\*\*\* date by

TPH-SEMIVOLATILE RANGE

ANALYTE

NWTPH-DX W/CLEANUP

ND

MG/KG

6/4/01

KAS

T "NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:

DIESEL RANGE REPORTING LIMIT IS 25 MG/KG

LUHE OIL RANGE REPORTING LIMIT IS 50 MG/KG

WHITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

\*\*\* ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY.

APPROVED BY:



CLIENT:

ENVIRONMENTAL PARTNERS, INC.

10940 NE 33RD PLACE, SUITE 110

BELLEVUE, WA 98004

DATE:

6/7/01

CCIL JOB #:

106007

CCIL SAMPLE #:

5

DATE RECEIVED:

6/1/01.

WDOE ACCREDITATION #:

C142

CLIENT CONTACT:

**ERIC KOLTES** 

CLIENT PROJECT ID:

33501.1

CLIENT SAMPLE ID:

NWWRB-3:6 5/31/01 1045

SOR IN KESUEK

ACTION ANALYSIS ANALYSIS
ANALYTE METHOD RESULTS\* UNITS\*\* LEVEL\*\*\* DATE BY

TPH-SEMIVOLATILE RANGE NWTPH-DX W/CLEANUP ND MG/KG 6/4/01 KAS

- "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING UMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
   DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
   LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG
- \*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS
- CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY.



SEEKTIFICATE OF ANALYSIS

CLIENT:

ENVIRONMENTAL PARTNERS, INC.

10940 NE 33RD PLACE, SUITE 110

BELLEVUE, WA 98004

DATE:

6/7/01

CCIL JOB #: CCIL SAMPLE #: 106007

DATE RECEIVED:

6/1/01

WDOE ACCREDITATION #:

C142

CLIENT CONTACT:

ERIC KOLTES

CLIENT PROJECT ID:

33501.1

CLIENT SAMPLE ID:

NWWRB-4:5 5/31/01 1100

DATA RESULTS

				<u> </u>		3.34.44.44
			-	ACTION	ANALYSIS	ANALYSI5
ANALYTE	. МЕТНОО	RESULTS*	UNIT5**	TEAETana	DATE	BY
TOU-CEMINOLATTIE DANCE	MACTON DV MICH CANILLO	ND	MC/VC		GMIOI	KVC

- "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:

DIESEL RANGE REPORTING LIMIT IS 25 MG/KG

LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

- " UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS
- \*\*\* ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY.

APPROVED BY:



SEEK OF THE CASE O

CLIENT: ENVIRONMENTAL PARTNERS, INC.

10940 NE 33RD PLACE, SUITE 110

BELLEVUE, WA 98004

DATE:

6/7/01

CCIL JOB #:

106007

CCIL SAMPLE #:

7

DATE RECEIVED:

6/1/01

WDOE ACCREDITATION #:

C142

CLIENT CONTACT:

**ERIC KOLTES** 

CLIENT PROJECT ID:

33501.1

CLIENT SAMPLE ID:

NWWRB-5:6 5/31/01 1130

CONTA RESULTS

ACTION ANALYSIS ANALY

\* "NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS: DIESEL RANGE REPORTING LIMIT IS 25 MG/KG LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

- " UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS
- \*\*\* ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY.

APPROVED BY:



STATE OF A STATE OF A

CLIENT: ENVIRONMENTAL PARTNERS, INC.

10940 NE 33RD PLACE, SUITE 110

BELLEVUE, WA 98004

DATE:

6/7/01

CCIL JOB #: CCIL SAMPLE #: 106007

DATE RECEIVED:

6/1/01

WDOE ACCREDITATION #:

C142

CLIENT CONTACT:

**ERIC KOLTES** 

CLIENT PROJECT ID:

33501.1

CLIENT SAMPLE ID:

NWWRB-6:S.5 5/31/01 1145

A CONTROL OF THE PROPERTY OF T

ACTION ANALYSIS ANALY51S LEVEL\*\*\* \*\*271/10 DATE ANALYTE METHOD RESULTS ₿Y ND 6/4/01 KAS TPH-SEMIVOLATILE RANGE NWTPH-DX W/CLEANUP MG/KG

"ND" INDICATES ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. RÉPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS: DIESEL RANGE REPORTING LIMIT IS 25 MG/KG LUSE OIL RANGE REPORTING LIMIT IS 50 MG/KG

- " UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS
- 22% ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION, WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY.

APPROVED BY:



CLIENT:

ENVIRONMENTAL PARTNERS, INC.

10940 NE 33RD PLACE, SUITE 110

BELLEVUE, WA 98004

DATE:

6/7/01

CCIL JOB #:

106007

CCIL SAMPLE #:

71/01

DATE RECEIVED:

6/1/01

WDOE ACCREDITATION #:

C142

CLIENT CONTACT:

**ERIC KOLTES** 

CLIENT PROJECT ID:

33501.1

CLIENT SAMPLE ID:

NWWRB-7:6 5/31/01 1215

	DAIA KESI	TE (Segment 197)		Secretary of the second	in the second and the	do in designant	,
•				ACTION	ANALYSIS	ANALYSIS	
ANALYTE.	метнор	RESULTS*	UNXTS**	<b>LEVEL</b> ***	DATE	₿Y	
TPH-SEMIVOLATILE RANGE	NWTPH-DX W/CLEANUP	ND	MG/KG		6/4/01	KAS	

• "NO" [NDICAYES ANALYTE ANALYZED FOR DUT NOT DETECTED AY LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:

DIESEL RANGE REPORTING LIMIT IS 25 MG/KG

LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

- units for all non liquid samples are reported on a dry weight basis
- \*\*\* ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY.

APPROVED BY:



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CLIENT: ENVIRONMENTAL PARTNERS, INC.

10940 NE 33RD PLACE, SUITE 110

BELLEVUE, WA 98004

DATE:

6/7/01

CCIL JOB #:

106007

CCIL SAMPLE #:

10 6/1/01

DATE RECEIVED: WDOE ACCREDITATION #:

C142

CLIENT CONTACT:

**ERIC KOLTES** 

CLIENT PROJECT ID:

33501.1

CLIENT SAMPLE ID:

NWWRB-8:5.5 5/31/01 1300

DATA RESULTS

ACTION ANALYSIS ANALYSTS LEVEL ΒY RESULTS\* UNITS## DATE ANALYTE METHOD KA5 6/4/01 TPH-SEMIVOLATILE RANGE NWTPH-DX W/CLEANUP ND MG/KG

" "NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHÈSES OR AS FOLLOWS:

DIESEL RANGE REPORTING LIMIT IS 35 MG/KG

LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

" UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

EVY ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY.

APPROVED BY:



CLIENT: ENVIRONMENTAL PARTNERS, INC.

10940 NE 33RD PLACE, SUITE 110

BELLEVUE, WA 98004

DATE:

6/7/01

CCIL JOB #: CCIL SAMPLE #:

106007

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DATE RECEIVED: WDOE ACCREDITATION #:

6/1/01 C142

CLIENT CONTACT: ERIC KOLTES

CLIENT PROJECT ID: CLIENT SAMPLE ID:

33501.1

MW-1 5/31/01 1130

· DATA RESUL	ا،	≎	
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ANALYSIS ANALYSIS ACTION UNITS LEVEL DATE ĐΥ RESULTS\* METHOD ANALYTE KAS 6/5/01 ND UG/L NWTPH-DX TPH-SEMIVOLATILE RANGE

- \* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS: DIESEL RANGE REPORTING LIMIT IS 250 UGA. LUBE OIL RANGE REPORTING LIMIT IS 500 UGAL
- " UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS
- --- ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY.



agreed CERTIFICATE OF ANALYSIS (1700年) 使自然的自己的主要的意

CLIENT:

ENVIRONMENTAL PARTNERS, INC.

10940 NE 33RD PLACE, SUITE 110

BELLEVUE, WA 98004

DATE:

6/7/01

CCIL JOB #.

106007

CCIL SAMPLE #:

12

DATE RECEIVED:

6/1/01

WDOE ACCREDITATION #:

C142

CLIENT CONTACT: ERIC KOLTES

CLIENT PROJECT ID: ,

33501.1

CLIENT SAMPLE ID:

MW-2 5/31/01 1010

### DATA RESULTS 1971 4 4 4

ACTION

ANALYSIS

ANALYSIS

ANALYTE

METHOD

RESULTS\*

UNITS

LEVEL\*\*\*

DATE

BY

TPH-SEMIVOLATILE RANGE

NWTPH-DX

ND

UG/L

6/6/01

KAS

""ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS: DIESEL RANGE REPORTING LIMIT IS 250 UG/L LUBE OIL RANGE REPORTING LIMIT IS 600 UGIL

- UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

.... ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION, WHEN PROVIDED, THEY SHOULD BE USED AS GLIDELINES ONLY.



EERFIEICATE OF ANALYSIS

CLIENT: ENVIRONMENTAL PARTNERS, INC.

10940 NE 33RD PLACE, SUITE 110

BELLEVUE, WA 98004

DATE: 6/7/01

CCIL JOB #: 106007

13

CCIL SAMPLE #:
DATE RECEIVED:

6/1/01

WDOE ACCREDITATION #:

C142

CLIENT CONTACT:

**ERIC KOLTES** 

CLIENT PROJECT ID:

33501.1

CLIENT SAMPLE ID:

NWWRB-7 5/31/01 1230

	DATAU	(ESULICS:   Date   Section		Maria Comment		
•				ACTION	ANALY515	ANALYSIS
ANALYTE	метноо	RESULTS*	UNITS**	LEVEL***	DATE	АУ
TPH-VOLATILE RANGE	NWTPH-GX	ND	UG/L		6/6/01	LAH
BENZENE	EPA-8021	4	UG/L	. \$ UG/L	6/6/01	LAH
TOLUENE	EPA-8021	ND(<1)	UG/L	40 UG/L	6/6/01	LAH
ETHYLBENZENE	EPA-8021	ND(<1)	UG/L	30 UG/L	6/6/01	LAH
XYLENES	EPA-8021	ND(<3)	UG/L	20 UG/L	6/6/01	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	UG/L		6/6/01	KAS
LEAD	EPA-7421	ND(<0.004)	MG/L		6/4/01	LMH

APPROVED BY: \_

<sup>- &</sup>quot;ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:

GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 50 UG/L

OIESEL RANGE REPORTING LIMIT IS 250 UG/L

LUBE OIL RANGE REPORTING LIMIT IS 500 UG/L

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

CONSISTENT APPLICATION, WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY.



CERTIFICATE OF ANALYSIS AND THE COMMON TO A COMMON TO SERVICE AND THE SERVICE AND TH

CLIENT:

ENVIRONMENTAL PARTNERS, INC.

10940 NE 33RD PLACE, SUITE 110

BELLEVUE, WA 98004

DATE:

6/7/01

CCIL JOB #:

106007

DATE RECEIVED:

6/1/01

WDOE ACCREDITATION #:

C142

CLIENT CONTACT: ERIC KOLTES

CLIENT PROJECT ID:

33501.1

	SURROGATE RE	COVERY	
CIL SAMPLE ID	ANALYTE	SUR JD	% REC
06007-01	NWTPH-DX	C25	91
06007-03	NWTPH-DX	C25	72
06007-05	NWTPH-DX	C25	82
06007-06	NWTPH-DX	C25	74
06007-07	NWTPH-DX	C25	67
06007-8	NM16H-DX	C25	60
06007-9	NWTPH-DX	C25	. 61
06007-10	NWTPH-DX	C25	61
06007-11	NWTPH-DX	C25	67
06007-12	NWTPH-DX	C25	90
06007-13	NWTPH-GX	TFT	87
06007-13	EPA-8021		99 110
		TFT C25	

Attachment B

00160



### SERVICES FACILITIES 1500 AIRPORT WAY SEATTLE, WA 98134

# BILL OF LADING AND GALLONAGE REPORT

CUSTOMER	CEON	Cold	>	DATE_	·(11910	f ·
JOB LOCATION						
DRIVER				EQUIP_		
JOB NO				DOCUMENT NO_	6694	
PRODUCT	GRALLY	LINTE	2	EST. GALS_	720	
PRODUCT	·	·	7-P-5-P-	EST GALS_	<u></u>	••
PRODUCT	<u></u>		·	EST GALS_		<sub>y</sub> )
DRUMS		,		NO_		
DRUMS				NO		Jan 18
ÖTHER		· · · · · · · · · · · · · · · · · · ·		EST SOLIDS_		
WASH OUT: YE	s⊡ no □	etine un equal (Adio Copera to Espera	TIME IN	T	IME OUT	
WATER	770	GAL	LOCATION	615,111:26	CODE Lif-	<u> </u>
SOLIDS	-	GAL	LOCATION		CODE	<u>.</u>
	% SUSPENDED S	OLIDS BY CE	NTRIFUGE +	G	ALS. SEDIMENT	
OIL/DIESEL	TONG	GAL	LOCATION	· · · · · · · · · · · · · · · · · · ·	CODE	· · · · · · · · · · · · · · · · · · ·
HOC'S	P	CB'S	B.S.& W	API	LAB: YES[	□ NO□ .
GAS		GAL	LOCATION	· · · · · · · · · · · · · · · · · · ·	,	
BUNKER FUEL		GAL	LOCATION			
OTHER				<u> </u>		-
Jacob	THIS MATERLE  THY REPRESENTA	1.	FED UNDER WAC-173	-303,0R-40CFR-RART 261-A	ND 40CFR PART 761  RIVER SIGNATURE	,

Attachment C

Client: Northwest Wire and Rope

Logged By: Eric Koltes

Date of Drilling: May 30, 2001

Sheet: 1 of 1

Drilling Contractor: Holt Drilling, Inc.

Method: Direct Push

Drill Rig: Limited Access

Borehole: 2"

			SUBSURFACE PROFILE	I		SAMPLE	]			
Depth	Log	USCS Code	Description	Spoon	Recovery	Sample	Sheen	PID	Well Data	Comments
0-			Ground Surface		T					
"	eksinen.		2" Asphalt							
1-			Well-Graded Sand Moist; dark brown; loose; mostly medium sand with trace fines.			·				
-										
2-		sw			ľ			. •		
_  			•			·				·
3-										
4-			•							
5 - 1						NWWRB-1:5	None	0.3		Slight Petroleum
6- -				A company ( A Company )		THE PARTY OF THE P	Note	0.0		Odor
7										·
-										·
8		-	Sandy Silt							No Odor
_		ML	Wet; gray; mostly silt with some fine sand.			NWWRB-1:8.5	None	0.0	▼	ATD 8.5'
9-										
10		CL	Lean Clay Moist; gray; mostly lean clay with trace fines; medium plasticity. End of Log							
=			medium plasticity. End of Log							
11-										
4			i							
12									<u>.</u>	

Client: Northwest Wire and Rope

Logged By: Eric Koltes

Date of Drilling: May 31, 2001

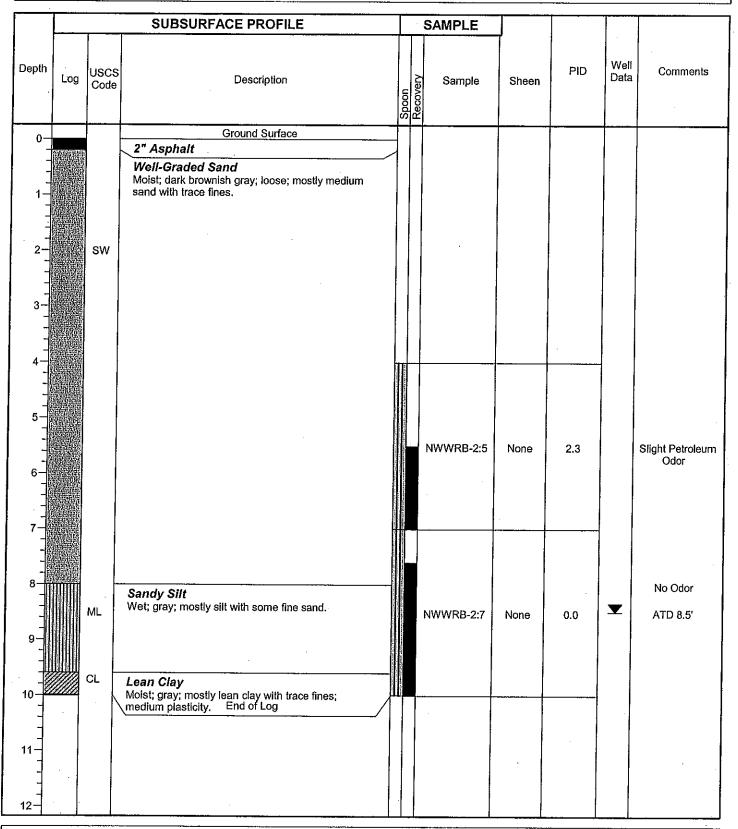
Sheet: 1 of 1

Drilling Contractor: Holt Drilling, Inc.

Method: Direct Push

Drill Rig: Limited Access

Borehole: 2"



Client: Northwest Wire and Rope

Logged By: Eric Koltes

Date of Drilling: May 30, 2001

**Sheet:** 1 of 1

Drilling Contractor: Holt Drilling, Inc.

Method: Direct Push

Drill Rig: Limited Access

Borehole: 2"

.			SUBSURFACE PROFILE			SAMPLE			T	
Depth	Log	USCS Code	Description	Spoon	Recovery	Sample	Sheen	PID	Well Data	Comments
0-			Ground Surface	Ť						
- - - 1-			2" Asphalt  Well-Graded Sand  Moist; dark brown; loose; mostly medium sand with trace fines.	1						
2		sw				·				
3			·							
4				With the second						
6-						NWWRB-3:6	None	3.0		
8			Sandy Silt						•	ATD 8.0'
9   -		ML _	Wet; gray; mostly silt with some fine sand.				None	0.0		
10		CL	Lean Clay Moist; gray; mostly lean clay with trace fines; medium plasticity.  End of Log							
11-						·				
12-										

Client: Northwest Wire and Rope

Logged By: Eric Koltes

Date of Drilling: May 30, 2001

Sheet: 1 of 1

Drilling Contractor: Holt Drilling, Inc.

Method: Direct Push

Drill Rig: Limited Access

Borehole: 2"

		1	SUBSURFACE PROFILE	Ι		SAMPLE			T	
Depth	Log	USCS Code	Description	Sooon	Recovery	Sample	Sheen	PID	Well Data	Comments
0-			Ground Surface	士				<del>                                     </del>		
	(Marian)		2" Asphalt	7						
1-			Well-Graded Sand Moist; dark brown; loose; mostly medium sand with trace fines.							
2-		sw				·				į
3-										
4-			•	**************************************						
5				The second secon		NWWRB-4:5	None	5.1		
6-1				The second secon			J			
7-  8- 		ML.	Sandy Silt Wet; gray; mostly sllt with some fine sand.						•	ATD 8.0'
9			Lean Clay Moist: gray mostly lean clay with trace fines.				None	0.0		
10-		CL	Moist; gray; mostly lean clay with trace fines; medium plasticity.							
-			End of Log		1					
11-										
12-	_			-						

Client: Northwest Wire and Rope

Logged By: Eric Koltes

Date of Drilling: May 30, 2001

Sheet: 1 of 1

Drilling Contractor: Holt Drilling, Inc.

Method: Direct Push

Drill Rig: Limited Access

Borehole: 2"

			SUBSURFACE PROFILE			SAMPLE				
Depth	Log	USCS Code	Description	Spoon	Recovery	Sample	Sheen	PID	Well Data	Comments
0-			Ground Surface	1	T					
1			2" Asphalt  Well-Graded Sand  Moist; dark brown; loose; mostly medium sand with trace fines.							
-										
2-		sw								
3-										
4-				196519	_				·	
5			, <del>*</del>	Contract of the second		NWWRB-5:5	None	13.8		
6-				A STATE OF THE PERSON NAMED OF THE PERSON NAME						
7-									•	
8-			Sandy Silt Wet; gray; mostly silt with some fine sand.	***************************************						ATD 7.5'
9-		ML	l can Clav		٠		None	0.0		
10		CL	Lean Clay Moist; gray; mostly lean clay with trace fines; medium plasticity.							
·			End of Log							× .
11-								-		
12-										

Client: Northwest Wire and Rope

Logged By: Eric Koltes

Date of Drilling: May 30, 2001

Sheet: 1 of 1

Drilling Contractor: Holt Drilling, Inc.

Method: Direct Push

Drill Rig: Limited Access

Borehole: 2"

			SUBSURFACE PROFILE	Τ		SAMPLE			T	
Depth	Log	USCS Code	Description	Spoon	Recovery	Sample	Sheen	PID	Well Data	Comments
0-			Ground Surface	T	T					
]	SORT IN	i	2" Asphalt	1	į				1	
1-			Well-Graded Sand Moist; dark brown; loose; mostly medium sand with trace fines.							
-										
2-		sw				,				
3-1-1										
4-				i i						
5—										
			,			NWWRB-6:5.5	None	0.5		
6-				and a community of the last of						
7-1					1					
8-		ML L.	Sandy Silt Wet; gray; mostly silt with some fine sand.						▼	ATD 7.5'
9-			Lean Clay  Moist; gray; mostly lean clay with trace fines; medium plasticity.				None	0.0		
10-		CL					·			
-			End of Log							
11-								E		
12-										

Client: Northwest Wire and Rope

Logged By: Eric Koltes

Date of Drilling: May 30, 2001

**Sheet:** 1 of 1

Drilling Contractor: Holt Drilling, Inc.

Method: Direct Push

Drill Rig: Limited Access

Borehole: 2"

			SUBSURFACE PROFILE	Τ		SAMPLE	]			<u></u>
Depth	Log	ÚSCS Code	Description	Spoon	Recovery	Sample	Sheen	PID	Well Data	Comments
0-			Ground Surface	T	İ					
]			2" Asphalt	-					}	
1-			Well-Graded Sand Moist; dark brown; loose; mostly medium sand with trace fines.							
2- 		sw								
3-1										·
4-				remarker.						
5—										
6-1						NWWRB-7:6	None	0.0		
7-										
8- 1		ML -	Sandy Silt Wet; gray; mostly silt with some fine sand.						•	ATD 7.5'
9-			Lean Clay Moist; gray; mostly lean clay with trace fines; medium plasticity.				None	0.0		
10		CL								
11-			End of Log							
12-										

Client: Northwest Wire and Rope

Logged By: Eric Koltes

Date of Drilling: May 30, 2001

Sheet: 1 of 1

Drilling Contractor: Holt Drilling, Inc.

Method: Direct Push

Drill Rig: Limited Access

Borehole: 2"

			SUBSURFACE PROFILE		_	SAMPLE				
Depth	Log	USCS Code	Description	Spoon	Recovery	Sample	Sheen	PID	Well Data	Comments
0-			Ground Surface	_	T		-			
			2" Asphalt	1						
1 -			Well-Graded Sand Moist; dark brown; loose; mostly medium sand with trace fines.							
2- - - 3-		SW								
4-				***************************************	_			·		
5-						NWWRB-8:5.5	None	0.6		
6-								**************************************		
7-1										
8 1 1 1 9		ML	Sandy Silt Wet; gray; mostly silt with some fine sand.	A STATE OF THE PROPERTY OF THE			None	0.0	<b>Y</b>	ATD 7.5'
10		CL -	Lean Clay Moist; gray; mostly lean clay with trace fines;	The second second second second						
11-			Moist; gray; mostly lean clay with trace fines; medium plasticity. End of Log				-			
12										

Client: Northwest Wire and Rope

Logged By: Eric Koltes

Date of Drilling: May 30, 2001

Sheet: 1 of 1

Drilling Contractor: Holt Drilling, Inc.

Method: Direct Push

Drill Rig: Limited Access

Borehole: 2"

		· · · · · · · · · · · · · · · · · · ·	SUBSURFACE PROFILE	Ĭ		SAMPLE				
Depth	Log	USCS Code	Description	Spoon	Docorren.	Sample	Sheen	PID	Well Data	Comments
0-			Ground Surface		t					
			2" Asphalt	1					i	
2-		sw	Well-Graded Sand Moist; dark brown; loose; mostly medium sand with trace fines.							
-										
4— 			·			None	None			Refusal @ 5' - No Sample Recovery
			End of Log							
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7		ŀ								
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**Attachment D** 





Photograph 2. Another view of well excavation activities.

Attachment E

	Manifest	网络罗思亚亚	Nor	n-Hazard	lous Soils	2/ 2/	↓ Man	100		
4	Date of Shipment:	Responsible for Consult	· ·	Transporte	r Truck #:		liven by TPS: <b>03525</b>		Load #	
	Cenerator's Name and Billin NORTHWEST WI 2301 LINCOLN	RE & ROPE			Generator's Phon (253) 5' Person to Contact RON KLI	72-8981 :	Generator's U			
	TACOMA, WA 9	8421	•	USA	FAX#: (253) 5'	72-8986	Customer Acco		with TPS:	
	Consultant's Name and Billi ENVIRONMENTA 10940 NE 33r	L PARTNERS	, INC.		Consultant's Pho Person to Contact ERIC KOI	ne #:				
	SUITE #110 BELLEVUE, WA	98004	1	USA	FAX#: <b>(425)</b> 8	88 <u>-4742</u>	Customer Acco		with TPS:	
	Ceneration Site (Transport to				Site Phone #:	39-4733	BTEX Levels	<u></u>		
 	NW WIRE ROPE 2301 LINCOLN		NT		Person to Contact	;	TPH Levels			
Corsultant	TACOMA MA O	10.401	ı	USA .	FAX#:	· ·	AVG. Levels			
So	TACOMA. WA 9 Designated Facility (Transpo	rt to): (name & address)		<u> </u>	Facility Phone #:		Facility Permit	Numbers		
Generator and/or	TPS Technolo 2800 - 104th	-	urt Souti	h	(253)584 Person to Contact Renee As FAX#:	:	Rica	Nelson		
nera	Lakewood, WA			USA	(253)584		Transporter's US EPA ID No.:			
g	Transporter Name and Maili CECON CORPOR				Transporter's Pho	72-8851`	<u>'</u>			
	1703 PORTLAN				Person to Contact	:	Transporter's I	OO'F No.:		
	TACOMA, WA 9	8421-2803		USA	PINKY CA FAX#: (253) 23		Customer Acco	ount Number v	with TPS:	
	Description of Soil	Molsture Content	Contaminated b	у: Аррго	x. Qty: Descri	ption of Delivery	Gross Weight	Tare Welght	Net Weigh	
1		0 - 10%	Gas D				25680	12620	13060	
	Sand Q Organic Q Clay Q Other Q	10 · 20% Q 20% - over Q	Diesel Q Other Q		<del></del>		1		•	
		10 · 20% Q 20% - over Q 0 · 10% Q 10 · 20% Q 20% - over Q				NET TONS=	6.53		ē.	
	Clay O Other O  Sand O Organic O Clay O Other O  List any exception to items listed  Generator's and/or consult Sheet completed and certifany way.	10 - 20%	Other O Gas O Dlesel O Other O  I/We certify that I Generation Site s	shown abo	ove and nothing h	taken entirely from	those soils desc	ribed in the S that would a	Soil Data ilter il in	
	Clay Q Other Q  Sand Q Organic Q Clay Q Other Q  List any exception to items listed  Generator's and/or consult Sheet completed and certifany way.  Print or Type Name:	10 - 20% Q 20% - over Q 0 - 10% Q 10 - 20% Q 20% - over Q above:    ltant's certification: I     fied by melus for the	Other O  Gas O Dlesel O Other O  I/We certify that I Generation Site s	shown abo	ove and nothing h	taken entirely from uas been added or do	those soils desc me to such soil	ribed in the S that would a	Day Year	
sporter	Clay O Other O  Sand O Organic O Clay O Other O  List any exception to items listed  Generator's and/or consultable Sheet completed and certificany way.  Print or Type Name:	10 - 20%	Other Q Gas Q Dlesel Q Other Q  I/We certify that I Generation Site s  Consultant C receipt of the so tify that this soil	shown abo	ove and nothing had nothing had not not not not not not not not not not	taken entirely from us been added or do ify that such soil is ted from the Genera	those soils desc me to such soil being delivered	ribed in the S that would a	Oay Year The same	
Transporter	Clay Q Other Q  Sand Q Organic Q Clay Q Other Q  List any exception to items listed  Generator's and/or consults of the completed and certification of the condition as when received without off-loading, adding the condition of	10 - 20%	Other Q Gas Q Dlesel Q Other Q  I/We certify that I Generation Site s  Consultant C receipt of the so tify that this soil	shown abo  Sign  il describe  I is being a  delaying a	ove and nothing had nothing had not not not not not not not not not not	taken entirely from us been added or do ify that such soil is ted from the Genera	those soils desc me to such soil being delivered	ribed in the S that would a Month I I in exactly Designated	Oay Year The same	
Facility	Clay Q Other Q  Sand Q Organic Q Clay Q Other Q  List any exception to items listed  Generator's and/or consults of the completed and certification of the condition as when received without off-loading, adding the condition of	10 - 20%   20% - over   0   10 - 20%   0   10 - 20%   0   20% - over   0   above:  Itant's certification: I iffed by mefus for the  Generator   0   0   0   0   0   0   0   0   0	Other G Gas G Dlesel G Other G  I/We certify that I Generation Site s  Consultant G  receipt of the so tify that this soil m or in any way	shown abo	nature and date:  ed above and cert directly transport delivery to such s nature and date:	taken entirely from us been added or do ify that such soil is ted from the Genera	those soils desc me to such soil being delivered	ribed in the S that would a Month I I in exactly Designated	Day Year  the same Facility	
	Clay Q Other Q  Sand Q Organic Q Clay Q Other Q  List any exception to items listed  Generator's and/or consults Sheet completed and certification way.  Print or Type Name:  ->  Transporter's certification condition as when receive without off-loading, addin  Print or Type Name;  Condition of the Name;  Condition of	10 - 20%   20% - over   0   10 - 20%   0   10 - 20%   0   20% - over   0   above:  Itant's certification: I lified by melus for the  Generator   0   0   0   0   0   0   0   0   0	Other G Gas G Dlesel G Other G  I/We certify that I Generation Site s  Consultant G  receipt of the so tify that this soil m or in any way	shown abo	nature and date:  ed above and cert directly transport delivery to such s nature and date:	taken entirely from us been added or do ify that such soil is ted from the Genera	those soils desc me to such soil being delivered ation Site to the	ribed in the S that would a Month I I in exactly Designated	Day Year  the same Facility	

Soil Master (c)

TPS Technologies, Inc.

# Customer Job Report Gross & Tare Weight Codes; M=Manual; S=Scale; T=Trk File

Job Numb	er Name		SiteAddress	Si	teCity	State	ZipCode
A03,035	25 NW WIRE ROP	E & EQUIPM	2301 LINCOLN AVENUE	TA	ACOMA	WA	98421
Load #	Date & Time Out	Transporter #	Truck & Trailer Number	Gross (lb)	Tare (lb)	Net (lb)	Net Wt (tons)
1	08/21/01 08:58	1001401	BRET	25,680M	12,620M	13,060	6.53
_	ed Loads Mar	nifests Received	Completed Weight 65,30%		ed Weight (tons)	тот	AL Net Wt: 6,53 (tons)

8/22/01