

PHASE II ENVIRONMENTAL SITE ASSESSMENT

SHELL OIL PRODUCTS US, SAP #121704

**14951 SW BANGY LANE
LAKE OSWEGO, OREGON**

DELTA PROJECT NO. PTSHL-ORDW-A.121704

ODEQ FILE NO. 03-07-1448

Prepared for:

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October 15, 2007

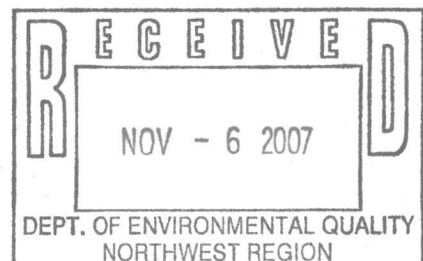


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EXECUTIVE SUMMARY

Delta Consultants (Delta) on behalf of Shell Oil Products US has completed an Environmental Site Assessment for Due Diligence at the Shell branded service station located at 14951 SW Bangy Lane, Lake Oswego, Clackamas County, Oregon. Delta performed the following work under the oversight of Shell Environmental Engineer, David Kremer:

- Prepared a site-specific Health & Safety Plan prior to the initiation of field activities
- Notified the Utility Notification Center to have public utilities in the area of the Site clearly marked
- Contracted with a private underground utility locating firm in addition to the public locates to clear each soil boring location
- Hand-excavated each soil boring location to 5-feet below ground surface (bgs) using air-knifing and vacuum truck equipment
- Advanced four soil borings (TKSB-1, TKS-3, DSSB-4 and DSSB-5) to a depth of 20 feet bgs using direct push probe drilling methods and equipment on August 27, 2007
- Collected representative soil samples continuously for logging and characterization of soil types, field screening, and potential laboratory analysis from the borings
- Conducted headspace screening of the soil samples for petroleum hydrocarbon vapors using a portable photo-ionization detector
- One soil sample from the sample interval directly above the soil/groundwater interface or at termination in each soil boring was submitted for laboratory analysis, and one groundwater sample from each boring, to Test America Laboratories, Inc. for analysis of:
 - Total petroleum hydrocarbons as gasoline (TPH-G) using Method NWTPH-Gx
 - Oregon Risk-Based Decision Making (RBDM) volatile organic compounds (VOCs) and the five Shell Oxygenates¹ by EPA SW-846 Method SW8260B
 - Total lead (soil) and dissolved lead (groundwater) by EPA Method 6010B

Because this site had a diesel tank, samples were also analyzed for:

- Total petroleum hydrocarbons as diesel (TPH-D) and motor oil using Method NWTPH-Dx with silica/gel cleanup

¹ Methyl tert-butyl ether, Tert-butyl alcohol, di-isopropyl ether, ethyl tert-butyl ether, and Tertiary Amyl Methyl Ether

- Polycyclic aromatic hydrocarbons (PAHs) using EPA Method 8270C-SIM

A summary of findings are as follows: All soil and groundwater laboratory results were reviewed for detections of petroleum constituents above the laboratory reporting limits, and compared to the most stringent of the Oregon Department of Environmental Quality's (ODEQ) Generic Risk Based Concentrations (RBCs) as listed in the September 2003 publication *Risk-Based Decision Making for the Remediation of Petroleum Contaminated Sites, (Appendix A Revised July, 4, 2007)*, hereafter referred to as RBC screening levels. Comparisons between the RBC screening levels and lab results can be found in **Tables 1A** through **1C** for soil samples and **Tables 2A** through **2C** for groundwater samples.

- None of the soil samples collected and submitted for laboratory analysis during this investigation contained concentrations of any constituent in excess of the RBC screening levels with one exception. Soil sample DSSB-5 contained a concentration of TPH-G (28.5 milligrams per kilogram [mg/kg]) in excess of the RBC screening level (26 mg/kg).
- The groundwater samples collected from TKSB-3, DSSB-4, and DSSB-5 and submitted for laboratory analysis during this investigation contained concentrations of at least one constituent in excess of RBC screening levels.
- ODEQ requires reporting of detections of petroleum constituents above laboratory reporting limits. Because there were detections of petroleum constituents above the laboratory reporting levels and/or the ODEQ RBC screening level, a release report was made to the ODEQ after receipt of the laboratory report. Based on the report, ODEQ opened a new petroleum release incident, numbered Lust Incident Log 03-07-1448.

The release report and response from ODEQ is included in **Appendix D**

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14951 SW BANGY LANE
LAKE OSWEGO, OREGON
DELTA PROJECT NO. PTSHL-ORDW-A.121704

1.0 INTRODUCTION

1.1 General

At the request of Shell Oil Products US (Shell), Delta Consultants (Delta) has conducted an Environmental Site Assessment for Due Diligence at the Shell Retail Store located at 14951 SW Bangy Lane, Lake Oswego, Clackamas County, Oregon. The site is an active Shell service station.

1.2 Purpose and Scope

In order to establish a baseline of environmental conditions, Delta conducted an assessment of subsurface conditions and potential hydrocarbon impact through implementation of the following scope of work:

- Prepared a site-specific Health & Safety Plan prior to the initiation of field activities
- Notified the Utility Notification Center to have public utilities in the area of the Site clearly marked
- Contracted with a private underground utility locating firm in addition to the public locates to clear each soil boring location
- Hand-excavated each soil boring location to 5-feet bgs using air-knifing and vacuum truck equipment
- Advanced four soil borings (TKSB-1, TKSB-3, DSSB-4 and DSSB-5) to a depth of 20 feet bgs using direct push probe drilling methods and equipment on August 27, 2007. Borings were placed in the vicinity of the underground storage tank [UST] basin and in the vicinity of dispensers or other items of interest. The defined scope limited drilling depth to 40 feet bgs around tank basins and 20 feet bgs near dispensers or other areas of interest; or to the depth of first encountered groundwater or drilling refusal whichever was less deep.
- Collected representative soil samples continuously with direct push probe drilling for logging and characterization of soil types, field screening, and potential laboratory analysis from the borings
- Conducted headspace screening of the soil samples for petroleum hydrocarbon vapors using a portable PID
- Submitted up to two soil samples and one groundwater sample from each boring to Test America Laboratories, Inc. (TA), located in Nashville Tennessee for analysis of:
 - TPH-G using Method NWTPH-Gx

- Oregon RBDM VOCs and the five Shell Oxygenates² by EPA SW-846 Method SW8260B
- Total lead and dissolved lead (groundwater) by EPA Method 6010B

Because this site had a diesel tank, samples were also analyzed for:

- TPH-D and motor oil using Method NWTPH-Dx with silica/gel cleanup
 - PAHs using EPA Method 8270C-SIM
- Evaluated and compiled field observations and laboratory analytical data into the report, documenting boring installations, soil and groundwater sampling, and analytical data.

1.3 Deviations

The following list summarizes deviations from the proposed scope of work and reason(s) for such deviation:

- Proposed soil boring location TKSB-2, proposed to investigate the northern portion of the tank pit, was not advanced due to an inability to clear a borehole location because of underground utilities and asphalt and concrete encountered underground.
- Proposed soil boring location DSSB-8, proposed to investigate the northeast side of the dispenser area, was not advanced due to an inability to clear a borehole location because of concrete encountered underground.
- Proposed soil borings DSSB-6 and DSSB-7, proposed to investigate the southeast and east sides of the dispenser area, respectively, were not advanced due to buried concrete encountered in several locations.
- Some of the sample re-runs were not run within the normal hold time required by the analytical methods. It is possible that these analytical results are therefore biased low. See the laboratory report for more details.

1.4 Background

The Site is an active retail gasoline station located in northwestern Oregon, in Clackamas County, at 14951 SW Bangy Lane in Lake Oswego (**Figure 1**). Above ground structures include a station building, and dispenser islands located east of the station building (**Figure 2**). The Site is primarily covered with asphalt and concrete pavement. The underground storage tanks (USTs) are located within a common excavation in the northern portion of the Site. Local access to the Site is gained from SW Bangy Lane to the east.

² Methyl tert-butyl ether, Tert-butyl alcohol, di-isopropyl ether, ethyl tert-butyl ether, and Tertiary Amyl Methyl Ether

2.0 SOIL AND GROUNDWATER ENVIRONMENTAL ASSESSMENT

2.1 Drilling and Soil Sampling

Soil borings were advanced using a direct-push hydraulic drive point system to a depth of 20 feet bgs. Soil samples were collected continuously using a 5-foot macro sampler with a 1.5-inch inside diameter driven into undisturbed formation materials utilizing a hydraulic piston mechanism. The soils encountered were logged using the Unified Soil Classification System and field screened using a PID by a Delta field technician working under the supervision of an Oregon Registered Geologist. Field observations, including soil color, odor, and PID readings, were recorded on the soil boring logs, included as **Appendix A**.

One soil sample from the sample interval directly above the soil/groundwater interface or at termination in each soil boring was submitted for laboratory analysis. These selected soil samples were placed into laboratory prepared sample containers and placed in an iced cooler for transport to TA in Beaverton, Oregon, under strict chain-of-custody (COC) protocols. The TA Lab in Beaverton filtered ground water samples for dissolved metals as necessary, and in most cases, shipped the samples to the TA laboratory in Nashville, Tennessee, for analysis. Soil analytical laboratory results are summarized in **Tables 1A, 1B and 1C** and shown spatially in **Figure 3**. The soil sample analytical laboratory report and COC records are included in **Appendix B**.

2.2 Grab Groundwater Sampling

Following borehole advancement, the probe rods were removed and a temporary well was lowered into the open annulus of the boring. The temporary well was constructed of 1-inch poly-vinyl chloride (PVC) piping with 5-feet of machine slotted screen. A grab groundwater sample was collected from the PVC temporary well of soil borings TKSB-1, TKSB-3, DSSB-4 and DSSB-5 using polyethylene tubing and a peristaltic pump. Groundwater samples were decanted directly into laboratory prepared sample containers and placed in an iced cooler for transport to TA under strict COC protocols. Groundwater analytical laboratory results are summarized in **Tables 2A, 2B and 2C** and shown spatially in **Figure 4**. The analytical laboratory reports and COC records for the groundwater sampling event are included in

2.3 Investigation Derived Waste

All investigation derived waste generated during the investigation was stored in United States Department of Transportation - approved 55-gallon drums for subsequent disposal following proper waste characterization. Decontamination wash water generated during the investigation was stored in a separate drum for subsequent recycling. Waste inventory, profile and manifests are included as **Appendix C**, if they were available at the time this report was prepared.

2.4 Laboratory Analytical Results

Soil analytical laboratory results are summarized in **Tables 1A, 1B and 1C**. Within the tables, samples with concentrations that exceed the RBC screening levels are bolded. The soil sample analytical laboratory report and COC records are included in **Appendix B**.

Groundwater analytical laboratory results are summarized in **Tables 2A, 2B and 2C**. Within the tables, samples with concentrations that exceed the RBC screening levels are bolded. The analytical laboratory reports and COC records for the groundwater event are included in **Appendix B**.

2.5 ODEQ Notification

ODEQ requires reporting of detections of petroleum constituents above laboratory reporting limits. Upon receipt and review of analytical data, petroleum (or other) constituents above the laboratory reporting limits, and/or above the ODEQ RBC screening level were detected. Based on these detections, Delta filed a 24-hour release report notification with ODEQ via the online incident reporting program web page. Based on the notification, ODEQ opened a new petroleum release incident, LUST Incident Log Number 03-07-1448.

A copy of the reporting form and ODEQ's response is included as **Appendix D**. The 20-Day report will be subsequently issued to the ODEQ under separate cover.

3.0 SUMMARY OF FINDINGS

3.1 Findings

Based on the scope of work performed, Delta presents the following summary of findings:

- Four soil exploration borings (TKSB-1, TKS-3, DSSB-4 and DSSB-5) were advanced on August 27, 2007, to a depth of 20 feet bgs
- All soil and groundwater laboratory results were reviewed for detections of petroleum constituents above the laboratory reporting limits, and compared to the most stringent ODEQ RBCs as listed in the September 2003 publication *Risk-Based Decision Making for the Remediation of Petroleum Contaminated Sites*, (Appendix A Revised July, 4, 2007), referred to as RBC screening levels in this report. Comparisons between the RBC screening level and lab results can be found in **Tables 1A, 1B, 1C, 2A, 2B and 2C**.
- None of the soil samples collected and submitted for laboratory analysis during this investigation contained concentrations of any constituent in excess of the RBC screening levels with one exception. Soil sample DSSB-5 contained a concentration of TPH-G (28.5 mg/kg) in excess of the RBC screening level (26 mg/kg).

- The groundwater samples collected from TKSB-3, DSSB-4, and DSSB-5 and submitted for laboratory analysis during this investigation contained concentrations of at least one constituent in excess of RBC screening levels.
- ODEQ requires reporting of detections of petroleum constituents above laboratory reporting limits. Because there were detections of petroleum constituents above the laboratory reporting levels and/or the ODEQ RBC screening level, a release report was made to the ODEQ after receipt of the laboratory report. Based on the report, ODEQ opened a new petroleum release incident, numbered Lust Incident Log 03-07-1448.

A copy of the reporting form and ODEQ's response is included as **Appendix D**. The 20-Day report will be subsequently issued to the ODEQ under separate cover.

4.0 REMARKS

The recommendations contained in this report represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. This report is based upon a specific scope of work requested by the client. The Contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of Delta's Client and anyone else specifically listed on this report.

This report was prepared by **DELTA CONSULTANTS**

Nancy Rodning

Nancy Rodning
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Reviewed by:

Jeff K. Schatz

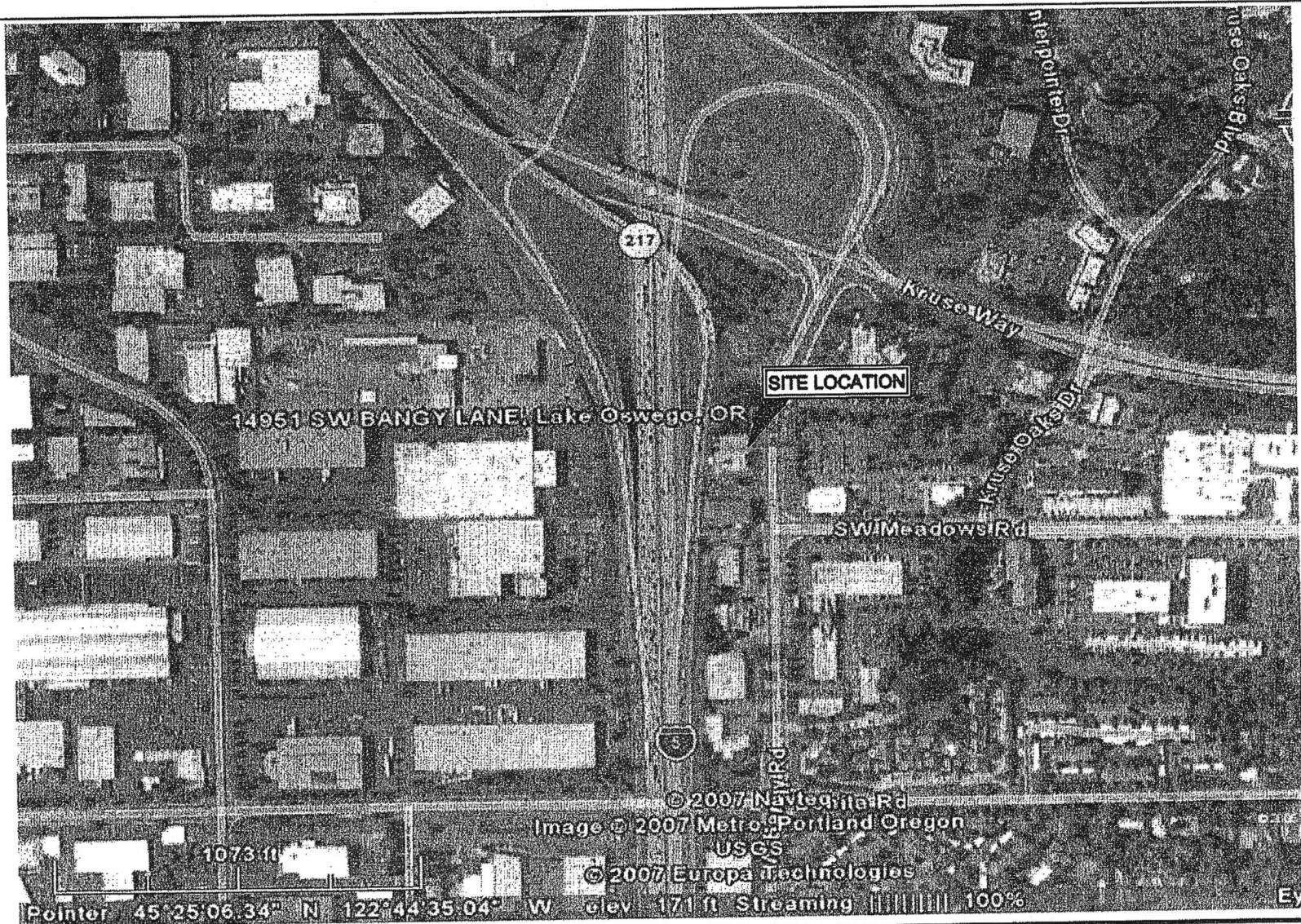
Jeff Schatz
Oregon Registered Geologist

Date: 10/15/2007

Date: 10/22/07

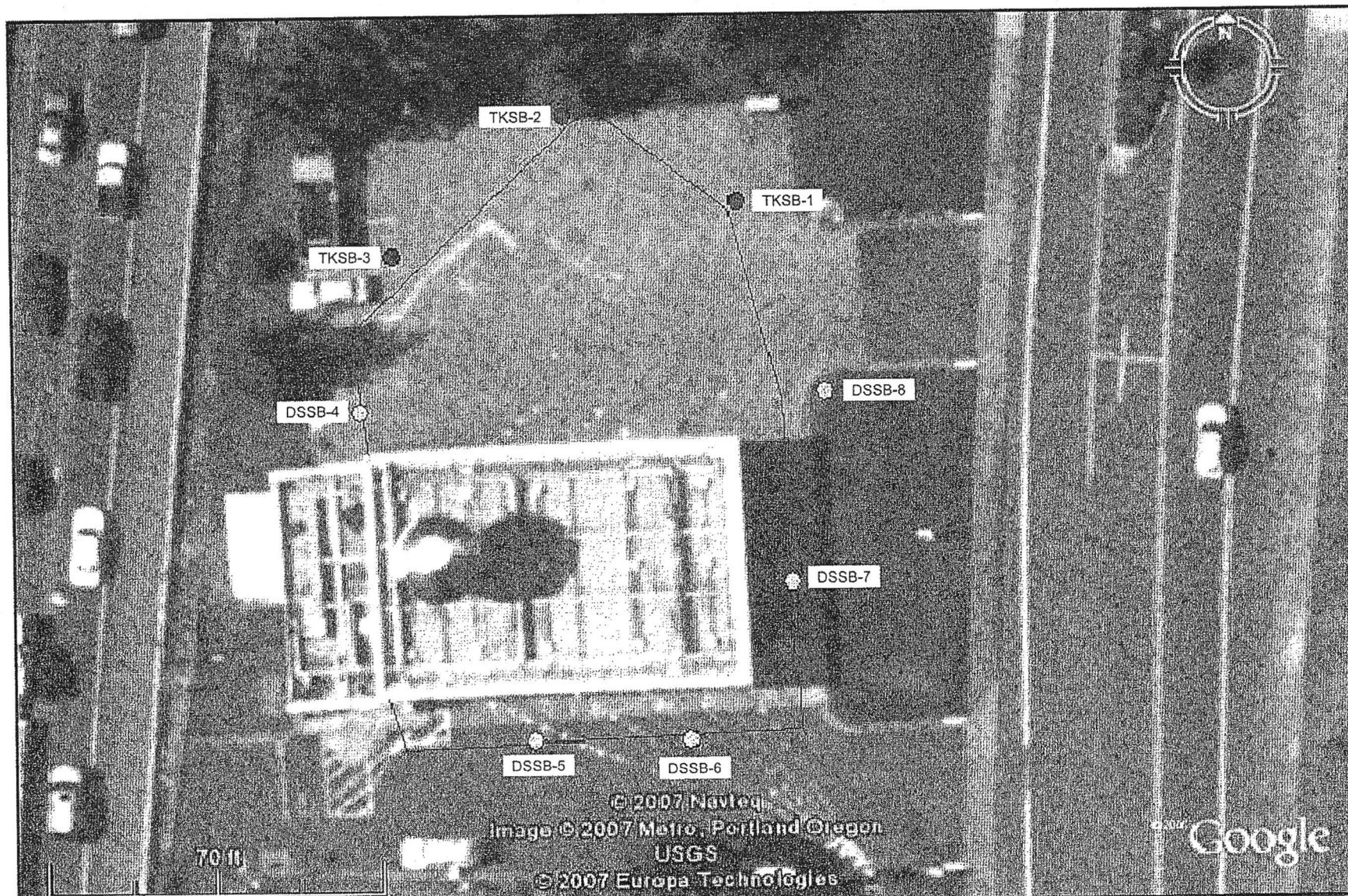


FIGURES



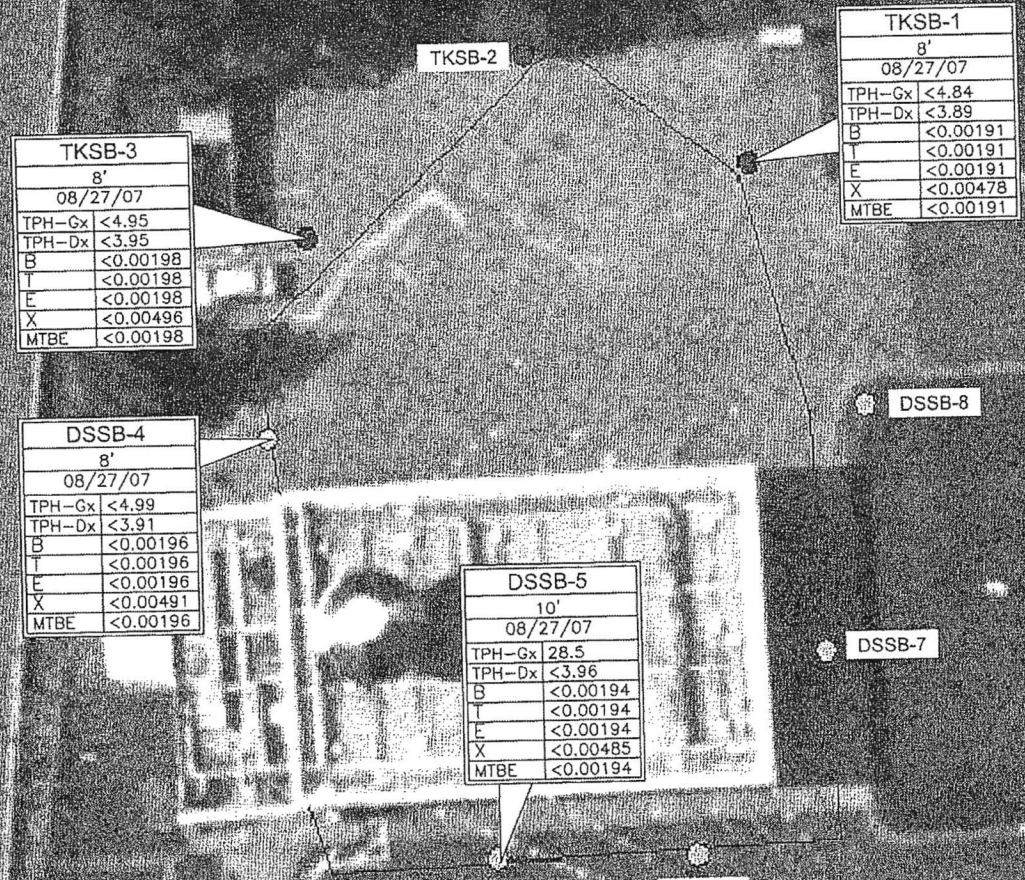
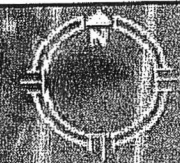
SITE LOCATION MAP
SHELL SAP# 121704
14951 SW BANGY LANE
LAKE OSWEGO, OREGON

DRAWN BY J.F.F.	PREPARED BY GT	PROJECT NO.: PTSHL-ORDW-A121704
CHKD:	APPD:	FIGURE NO.: 1
DATE: 9/10/2007	FILE NO. 121704-1	



SITE MAP
SHELL SAP# 121704
14951 SW BANGY LANE
LAKE OSWEGO, OREGON

DRAWN BY DD	PREPARED BY NR	PROJECT NO.: 121704
CHKD:	APPD:	FIGURE NO.:
DATE: 10/2/07	FILE NO. 121704-2	2



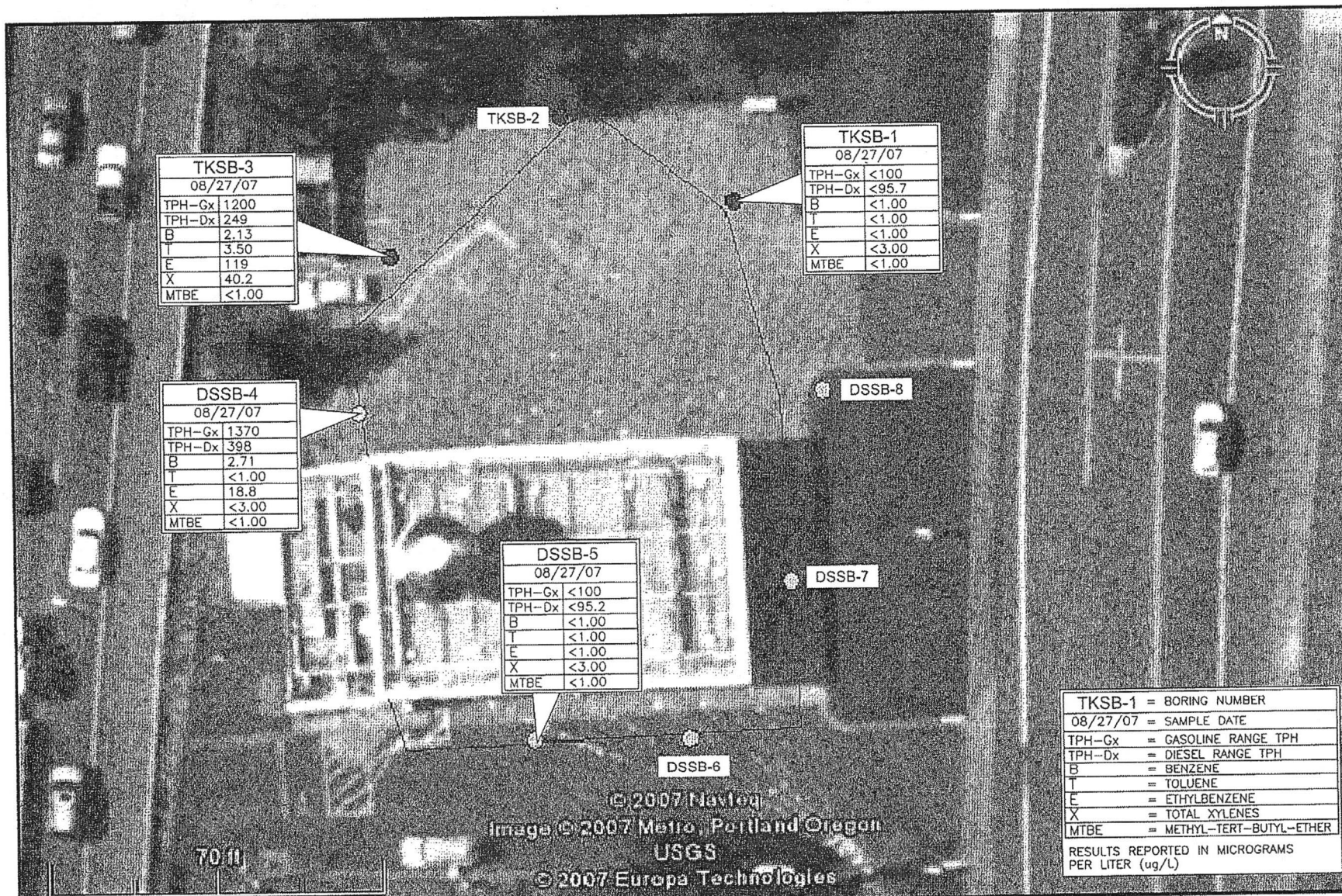
TKSB-1	= BORING NUMBER
8'	= SAMPLE DEPTH (FEET)
08/27/07	= SAMPLE DATE
TPH-Gx	= GASOLINE RANGE TPH
TPH-Dx	= DIESEL RANGE TPH
B	= BENZENE
T	= TOLUENE
E	= ETHYLBENZENE
X	= TOTAL XYLENES
MTBE	= METHYL-TERT-BUTYL-ETHER
RESULTS REPORTED IN MILLIGRAMS PER KILOGRAM (mg/kg)	

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USGS
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SOIL CONCENTRATION MAP
SHELL SAP# 121704
14951 SW BANGY LANE
LAKE OSWEGO, OREGON

DRAWN BY DD	PREPARED BY NR	PROJECT NO.: 121704
CHKD:	APPD:	FIGURE NO.: 3
DATE: 10/2/07	FILE NO. 121704-2	



GROUNDWATER CONCENTRATION MAP
SHELL SAP# 121704
14951 SW BANGY LANE
LAKE OSWEGO, OREGON

DRAWN BY
DD
CHKD:
DATE:
10/2/07

PREPARED BY
NR
APPD:
FILE NO.
121704-2

PROJECT NO.:
121704
FIGURE NO.:
4



TABLES

TABLE 1A
SUMMARY OF SOIL ANALYTICAL RESULTS - TPH AND METALS
SAP No. 121704
14951 SW Bangy Lane
Lake Oswego, Oregon

Sample Identification	Sample Depth (feet)	Sample Date	Total Petroleum Hydrocarbons			Metals			
			Gasoline Range (mg/kg)	Diesel Range (mg/kg)	Heavy Oil Range (mg/kg)	Total Lead (mg/kg)	TCLP Lead (mg/L)	TCLP Cadmium (mg/L)	TCLP Chromium (mg/L)
TKSB-1	8	08/27/07	<4.84	<3.89	<3.89	5.53	NA	NA	NA
TKSB-3	8	08/27/07	<4.95	<3.95	<3.95	6.80	NA	NA	NA
DSSB-4	8	08/27/07	<4.99	<3.91	<3.91	6.63	NA	NA	NA
DSSB-5	10	08/27/07	28.5	<3.96	<3.96	5.78	NA	NA	NA
RBC Screening Level ^a			28	2,800	NE	30	NE	NE	NE
Notes: mg/kg = milligrams per kilogram mg/L = milligrams per Liter Gasoline-range hydrocarbons by Method NWTPH-Gx Diesel and heavy oil-range hydrocarbons by Method NWTPH-Dx Total Metals by EPA Method 6010B TCLP Metals by 6000/7000 Series Methods < = Not detected at concentration exceeding laboratory method reporting limit (MRL) RBC = Risk-Based Concentration NE = Not Established NA = Not Analyzed ^a = The most stringent of the generic RBC standards, assuming residential exposure scenarios, were used as a screening level									

TABLE 1B
OIL ANALYTICAL RESULTS - RBDM VOCs
SAP No. 121704
14951 SW Bangy Lane
Lake Oswego, Oregon

Sample Identification	Sample Depth (feet)	Sample Date	Volatile Organic Compounds														
			Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Isopropylbenzene (mg/kg)	N-propylbenzene (mg/kg)	1,2,4-TMB (mg/kg)	1,3,5-TMB (mg/kg)	Naphthalene (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	MTBE (mg/kg)	EOB (mg/kg)
TKSB-1	8	08/27/07	<0.00191	<0.00191	<0.00191	<0.00478	<0.00191	<0.00191	<0.00191	<0.00191	NA	<0.0478	<0.00191	<0.00478	<0.00191	<0.00191	<0.00191
TKSB-3	8	08/27/07	<0.00198	<0.00198	<0.00198	<0.00496	<0.00198	<0.00198	<0.00198	<0.00198	NA	<0.0496	<0.00198	<0.00496	<0.00198	<0.00198	<0.00198
DSSB-4	8	08/27/07	<0.00196	<0.00196	<0.00196	<0.00491	<0.00196	<0.00196	<0.00196	<0.00196	NA	<0.0491	<0.00196	<0.00491	<0.00196	<0.00196	<0.00196
DSSB-5	10	08/27/07	<0.00194	<0.00194	<0.00194	<0.00485	<0.00194	<0.00194	<0.00194	0.00830	0.00227	NA	<0.0485	<0.00194	<0.00485	<0.00194	<0.00194
PCB Analysis			0.0084	140	160	26	2800	52	14	31	3.8	NE	NE	NE	NE	0.002	0.000735

Notes:

< = Not detected at concentration exceeding laboratory method reporting limit (MRL)

RBDM = Risk-Based Decision Making

VOC = Volatile organic compound

1,2,4-TMB = 1,2,4-trimethylbenzene

1,3,5-TMB = 1,3,5-trimethylbenzene

TBA = Tertiary Butyl Alcohol

DIPE = Diisopropyl Ether

ETBE = Ethyl tert-Butyl Ether

TAME = Tert-Amyl Butyl Ether

MTBE = Methyl tert-Butyl Ether

EDB = 1,2-dibromoethane

EDC = 1,2-dichloroethane

NE = Not Established

NA = Not Analyzed

RBC = Risk Based

VOC analysis by EPA Method 826

^a = The most stringent of the generic RBC standards for soil, assuming residential exposure scenarios, were used as a screening level

- The most stringent of the genetic tests

TABLE 1C
SUMMARY OF SOIL ANALYTICAL RESULTS - PAHs
SAP No. 121704
14951 SW Bangy Lane
Lake Oswego, Oregon

Sample Identification	Sample Depth (feet)	Sample Date	Polynuclear Aromatic Hydrocarbons																
			Acenaphthene (mg/kg)	Acenaphthylene (mg/kg)	Anthracene (mg/kg)	Benzo(a) anthracene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(ghi) perylene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenzo(a,h) anthracene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	2-Methyl naphthalene (mg/kg)	Naphthalene (mg/kg)	Phenanthrene (mg/kg)	Pyrene (mg/kg)
TKSB-1	8	08/27/07	<0.00331	<0.00331	<0.00331	<0.00331	<0.00331	<0.00331	<0.00331	<0.00331	<0.00331	<0.00331	<0.00331	<0.00331	<0.00331	<0.00331	<0.00331	<0.00331	
TKSB-3	8	08/27/07	<0.00324	<0.00324	<0.00324	<0.00324	<0.00324	<0.00324	<0.00324	<0.00324	<0.00324	<0.00324	<0.00324	<0.00324	<0.00324	<0.00324	<0.00324	<0.00324	
DSSB-4	8	08/27/07	<0.00329	<0.00329	<0.00329	<0.00329	<0.00329	<0.00329	<0.00329	<0.00329	<0.00329	<0.00329	<0.00329	<0.00329	<0.00329	<0.00329	<0.00329	<0.00329	
DSSB-5	10	08/27/07	<0.00326	<0.00326	<0.00326	<0.00326	<0.00326	<0.00326	<0.00326	<0.00326	<0.00326	<0.00326	<0.00326	<0.00326	<0.00326	<0.00326	<0.00326	<0.00326	
RBC Screening Level:			2,900	NE	21,000	0.15	0.015	0.15	NE	15	15	0.015	2,300	2,600	0.15	NE	3.0	NE	1,700

Notes:

mg/kg = milligrams per kilogram

< = Not detected at concentration exceeding laboratory method reporting limit (MRL)

RBC = Risk Based Concentration

PAH analysis by EPA Method 8270m

NE = Not Established

NA = Not Analyzed

* = The most stringent of the generic RBC standards, assuming residential exposure scenarios, were used as a screening level

TABLE 2A
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS - TPH AND METALS
 SAP No. 121704
 14951 SW Bangy Lane
 Lake Oswego, Oregon

Sample Identification	Sample Date	Total Petroleum Hydrocarbons			Dissolved Metals		
		Gasoline Range (µg/L)	Diesel Range (µg/L)	Heavy Oil Range (µg/L)	Lead (µg/L)	Cadmium (µg/L)	Chromium (µg/L)
TKSB-1	08/27/07	<100	<95.7	149	<5.00	NA	NA
TKSB-3	08/27/07	1200	249	<95.7	<5.00	NA	NA
DSSB-4	08/27/07	1370	398	<96.2	<5.00	NA	NA
DSSB-5	08/27/07	<100	<95.2	<95.2	<5.00	NA	NA
RBC Screening Level^a		100	88	NE	15	18	110
Notes: Results reported in micrograms per liter (µg/L) Gasoline-range hydrocarbons by Method NWTPH-Gx Diesel and oil-range hydrocarbons by Method NWTPH-Dx Dissolved Metals by EPA Method 6010B < = Not detected at concentration exceeding laboratory method reporting limit (MRL) RBC = Risk Based Concentration NE = Not Established NA = Not Analyzed ^a = The most stringent of the generic RBC standards, assuming residential exposure scenarios, were used as screening levels							

TABLE 2B

SAP No. 121704
14951 SW Bangy Lane
Lake Oswego, Oregon

Volatile Organic Compounds - 8260B

TABLE 2C
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS - PAHs
SAP No. 121704
14951 SW Bangy Lane
Lake Oswego, Oregon

Sample Identification	Sample Date	Polynuclear Aromatic Hydrocarbons																
		Acenaphthene (µg/L)	Acenaphthylene (µg/L)	Anthracene (µg/L)	Benzo(a) anthracene (µg/L)	Benzo(a) pyrene (µg/L)	Benzo(b) fluoranthene (µg/L)	Benzo(ghi) perylene (µg/L)	Benzo(k) fluoranthene (µg/L)	Chrysene (µg/L)	Dibenzo(a,h) anthracene (µg/L)	Fluoranthene (µg/L)	Fluorene (µg/L)	Indeno (1,2,3-cd) pyrene (µg/L)	2-Methyl naphthalene (µg/L)	Naphthalene (µg/L)	Phenanthrene (µg/L)	Pyrene (µg/L)
TKSB-1	08/27/07	<0.120	<0.120	<0.120	<0.120	<0.120	<0.120	<0.120	<0.120	<0.120	<0.120	<0.120	<0.120	<0.120	12.3	17.8	<0.0962	<0.0962
TKSB-3	08/27/07	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	2.59	4.41	<0.106	<0.106
DSSB-4	08/27/07	<0.106	<0.106	<0.106	<0.106	<0.106	<0.106	<0.106	<0.106	<0.106	<0.106	<0.106	<0.106	<0.106	10.9	15.2	<0.143	<0.143
DSSB-5	08/27/07	<0.143	<0.143	<0.143	<0.143	<0.143	<0.143	<0.143	<0.143	<0.143	<0.143	<0.143	<0.143	<0.143	NE	NE	NE	100
RBC Screening Level		370	NE	1,800	0.029	0.0029	0.029	NE	0.29	2.9	0.0029	1,500	240	0.029	NE	6.2	NE	100

Notes:

µg/L = micrograms per Liter

< = Not detected at concentration exceeding laboratory method reporting limit (MRL)

RBC = Risk Based Concentration

PAH analysis by EPA Method 8270m

NE = Not Established

NA = Not Analyzed

* = The most stringent of the generic RBC standards, assuming residential exposure scenarios, were used as a screening level

APPENDIX A
SOIL BORING LOGS



BORING LOG

Client **Shell Oil Products US**
 Project Number **PTSHLORDWA 121704**

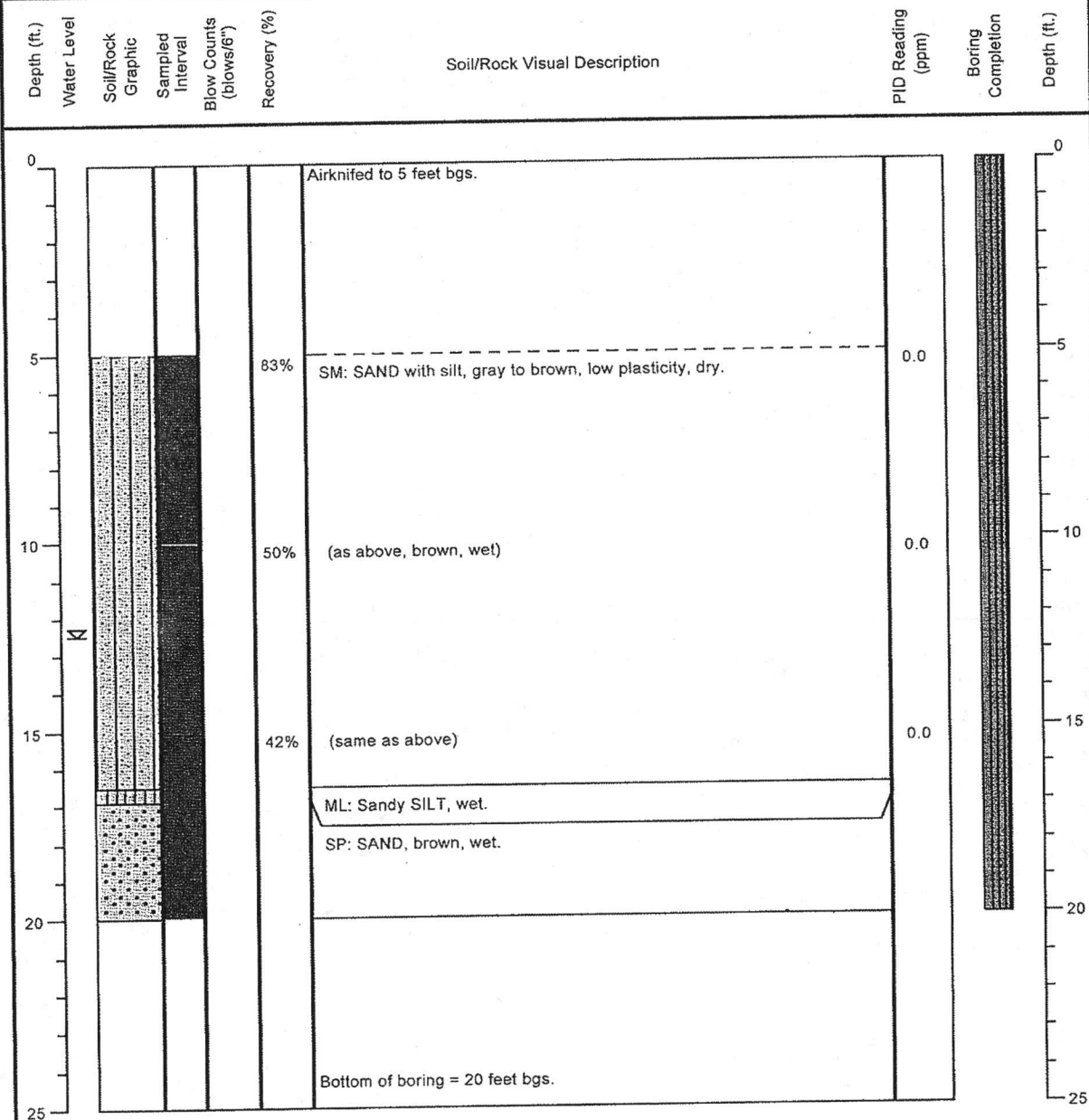
Boring No.
TKSB-1

Address:
14951 SW Bangy Road
Lake Oswego, Oregon
 Logged By: **Jeff Schulz**

Drilling Date(s): **8/27/07**
 Drilling Company: **Cascade**
 Drilling Method: **Direct Push**
 Boring Depth (ft): **20**

Boring diameter (in.): **2**
 Sampling Method: **Continuous Core**
 Well Depth (ft.): **NA**
 Casing Diameter (in.): **NA**

Casing Material: **NA**
 Screen Interval: **NA**
 Screen slot size: **NA**
 Sand Pack: **NA**





BORING LOG

Client **Shell Oil Products US**
 Project Number **PTSHLORDWA 121704**

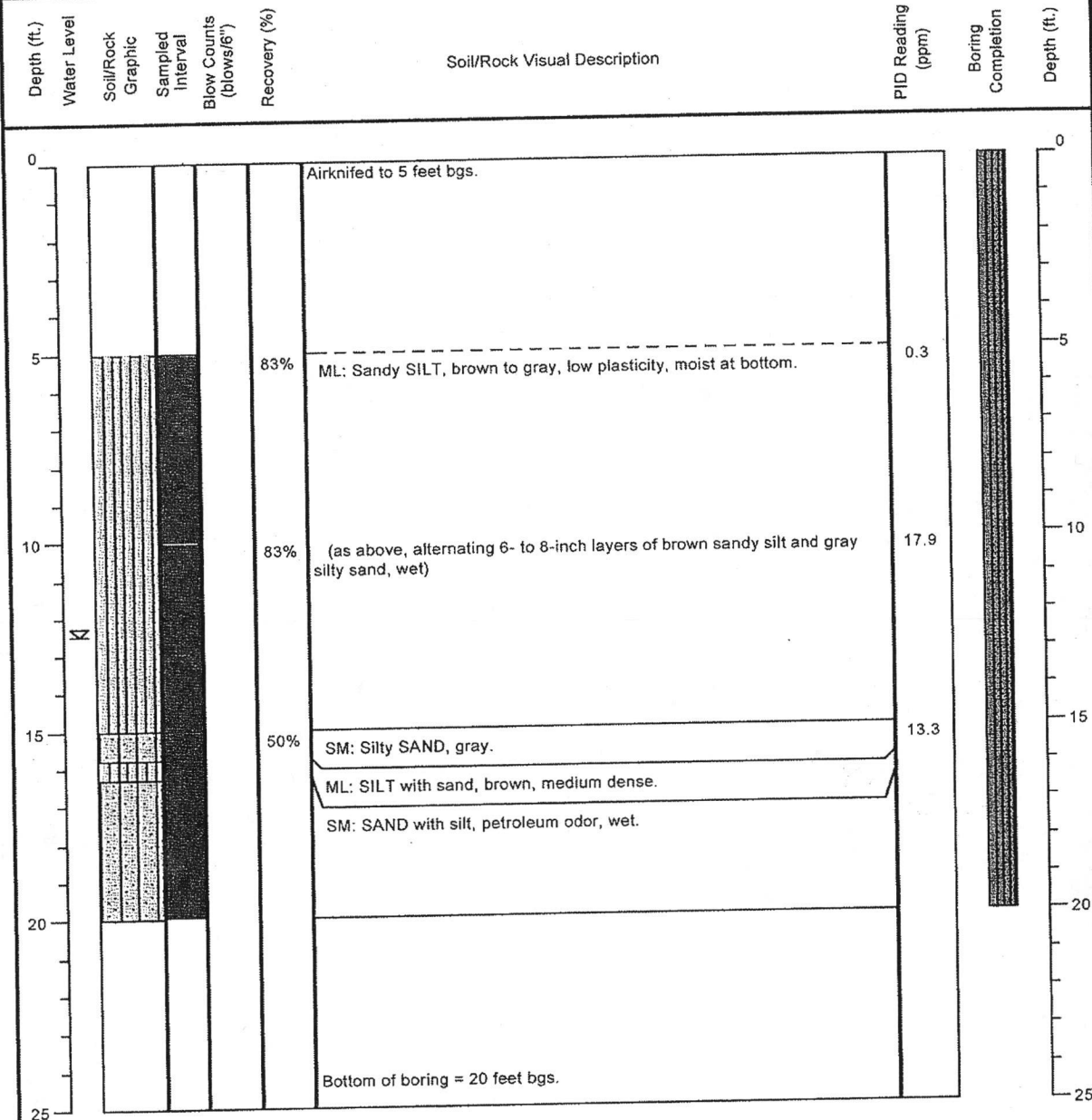
Boring No.
TKSB-3

Address:
14951 SW Bangy Road
Lake Oswego, Oregon
 Logged By: **Jeff Schulz**

Drilling Date(s): **8/27/07**
 Drilling Company: **Cascade**
 Drilling Method: **Direct Push**
 Boring Depth (ft): **20**

Boring diameter (in.): **2**
 Sampling Method: **Continuous Core**
 Well Depth (ft.): **NA**
 Casing Diameter (in.): **NA**

Casing Material: **NA**
 Screen Interval: **NA**
 Screen slot size: **NA**
 Sand Pack: **NA**





BORING LOG

Client **Shell Oil Products US**
 Project Number **PTSHLORDWA 121704**

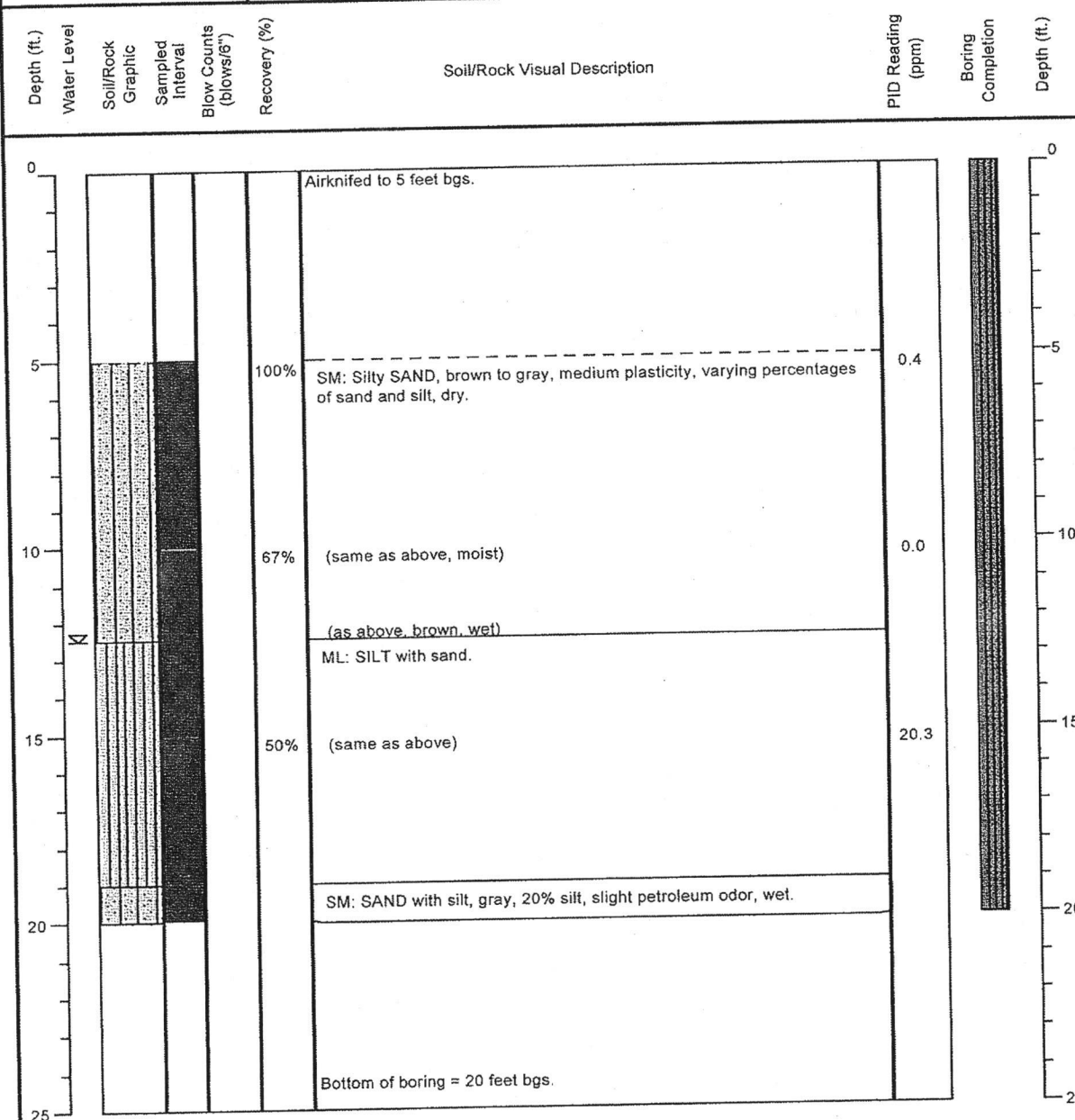
Boring No.
DSSB-4

Address:
14951 SW Bangy Road
Lake Oswego, Oregon
 Logged By: **Jeff Schulz**

Drilling Date(s): **8/27/07**
 Drilling Company: **Cascade**
 Drilling Method: **Direct Push**
 Boring Depth (ft): **20**

Boring diameter (in.): **2**
 Sampling Method: **Continuous Core**
 Well Depth (ft.): **NA**
 Casing Diameter (in.): **NA**

Casing Material: **NA**
 Screen Interval: **NA**
 Screen slot size: **NA**
 Sand Pack: **NA**





BORING LOG

Client Shell Oil Products US
Project Number PTSHLORDWA 121704

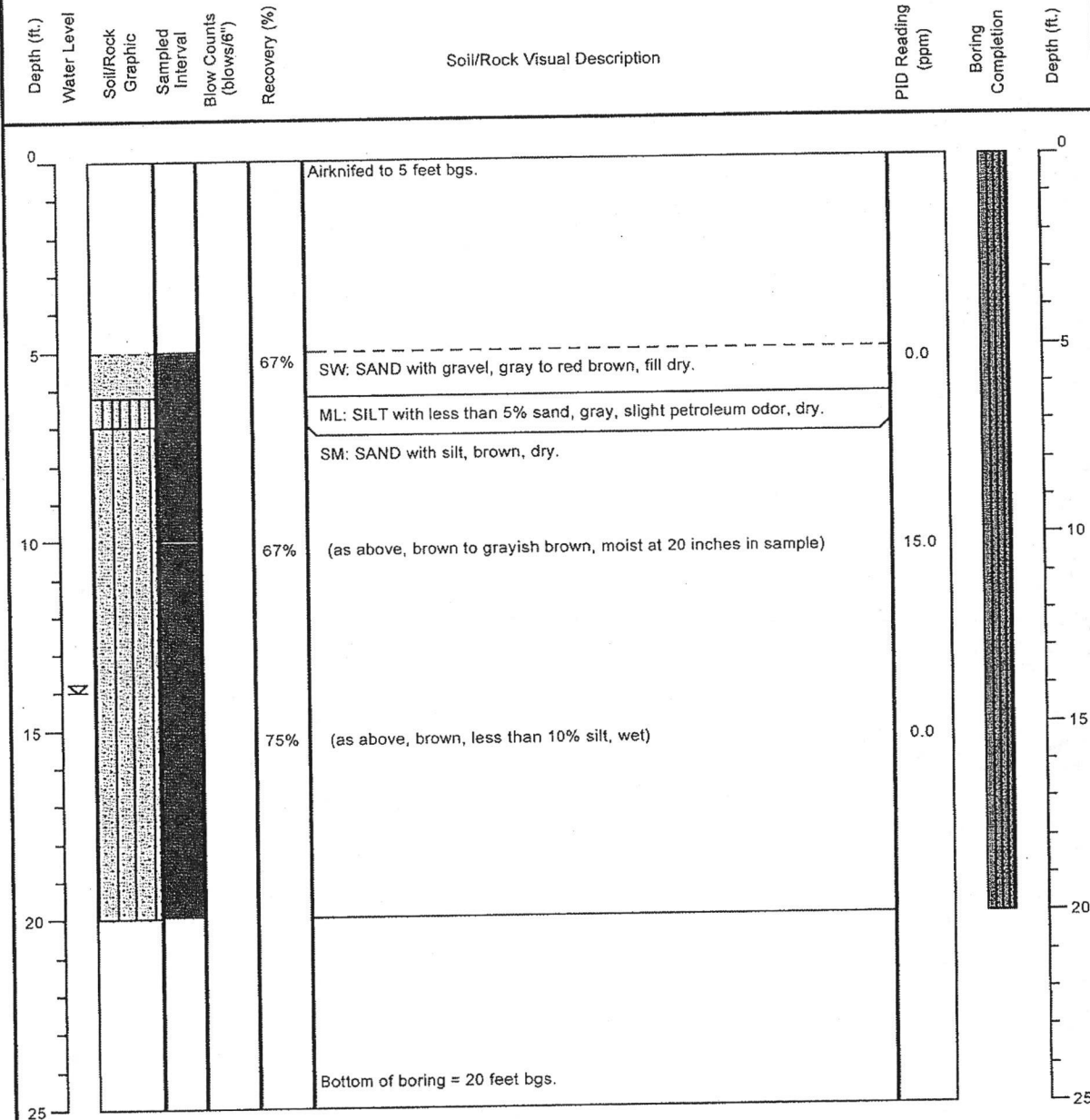
Boring No.
DSSB-5

Address:
14951 SW Bangy Road
Lake Oswego, Oregon
Logged By: Jeff Schulz

Drilling Date(s): 8/27/07
Drilling Company: Cascade
Drilling Method: Direct Push
Boring Depth (ft): 20

Boring diameter (in.): 2
Sampling Method: Continuous Core
Well Depth (ft.): NA
Casing Diameter (in.): NA

Casing Material: NA
Screen Interval: NA
Screen slot size: NA
Sand Pack: NA



APPENDIX B
LABORATORY REPORTS
AND CHAIN OF CUSTODY FORMS

October 24, 2007

8:58:58AM

Client: Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn: Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Nbr: SAP 121704
P/O Nbr:
Date Received: 08/30/07

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
TKSB-1-8	NQH3608-01	08/27/07 11:15
TKSB-1	NQH3608-02	08/27/07 11:15
TKSB-3-8	NQH3608-03	08/27/07 10:00
TKSB-3	NQH3608-04	08/27/07 10:00
DSSB-4-8	NQH3608-05	08/27/07 09:30
DSSB-4	NQH3608-06	08/27/07 09:30
DSSB-5-10	NQH3608-07	08/27/07 12:30
DSSB-5	NQH3608-08	08/27/07 12:30
Trip Blank	NQH3608-09	08/27/07 00:01

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately at 615-726-0177.

Additional Laboratory Comments:

Revised Report - MDH: Due to lab error, the compound 1,2-Dichloroethane has been added to the water samples in this report.
Oregon Certification Number: TN200001

The Chain(s) of Custody, 3 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Report Approved By:



Mark Hollingsworth

Program Manager - National Accounts

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NQH3608-01 (TKSB-1-8 - Soil) Sampled: 08/27/07 11:15								
Total Metals by EPA Method 6010B								
Lead	5.53		mg/kg	0.994	1	09/07/07 08:01	SW846 6010B	7085913
Volatile Organic Compounds by EPA Method 8260B								
Tertiary Butyl Alcohol	ND		mg/kg	0.0478	1	09/08/07 02:15	SW846 8260B	7090348
Diisopropyl Ether	ND		mg/kg	0.00191	1	09/08/07 02:15	SW846 8260B	7090348
Ethyl tert-Butyl Ether	ND		mg/kg	0.00478	1	09/08/07 02:15	SW846 8260B	7090348
Tert-Amyl Methyl Ether	ND		mg/kg	0.00191	1	09/08/07 02:15	SW846 8260B	7090348
Benzene	ND		mg/kg	0.00191	1	09/08/07 02:15	SW846 8260B	7090348
1,2-Dibromoethane (EDB)	ND		mg/kg	0.00191	1	09/08/07 02:15	SW846 8260B	7090348
1,2-Dichloroethane	ND		mg/kg	0.00191	1	09/08/07 02:15	SW846 8260B	7090348
Ethylbenzene	ND		mg/kg	0.00191	1	09/08/07 02:15	SW846 8260B	7090348
Isopropylbenzene	ND		mg/kg	0.00191	1	09/08/07 02:15	SW846 8260B	7090348
Methyl tert-Butyl Ether	ND		mg/kg	0.00191	1	09/08/07 02:15	SW846 8260B	7090348
n-Propylbenzene	ND		mg/kg	0.00191	1	09/08/07 02:15	SW846 8260B	7090348
Toluene	ND		mg/kg	0.00191	1	09/08/07 02:15	SW846 8260B	7090348
1,3,5-Trimethylbenzene	ND		mg/kg	0.00191	1	09/08/07 02:15	SW846 8260B	7090348
1,2,4-Trimethylbenzene	ND		mg/kg	0.00191	1	09/08/07 02:15	SW846 8260B	7090348
Xylenes, total	ND		mg/kg	0.00478	1	09/08/07 02:15	SW846 8260B	7090348
Surr: 1,2-Dichloroethane-d4 (54-145%)	103 %					09/08/07 02:15	SW846 8260B	7090348
Surr: Dibromofluoromethane (67-129%)	104 %					09/08/07 02:15	SW846 8260B	7090348
Surr: Toluene-d8 (66-142%)	98 %					09/08/07 02:15	SW846 8260B	7090348
Surr: 4-Bromofluorobenzene (68-150%)	96 %					09/08/07 02:15	SW846 8260B	7090348
Polyaromatic Hydrocarbons by EPA 8270C SIM								
Acenaphthene	ND		mg/kg	0.00331	1	09/03/07 05:54	SW846 8270CSIN	7085875
Acenaphthylene	ND		mg/kg	0.00331	1	09/03/07 05:54	SW846 8270CSIN	7085875
Anthracene	ND		mg/kg	0.00331	1	09/03/07 05:54	SW846 8270CSIN	7085875
Benzo (a) anthracene	ND		mg/kg	0.00331	1	09/03/07 05:54	SW846 8270CSIN	7085875
Benzo (a) pyrene	ND		mg/kg	0.00331	1	09/03/07 05:54	SW846 8270CSIN	7085875
Benzo (b) fluoranthene	ND		mg/kg	0.00331	1	09/03/07 05:54	SW846 8270CSIN	7085875
Benzo (g,h,i) perylene	ND		mg/kg	0.00331	1	09/03/07 05:54	SW846 8270CSIN	7085875
Benzo (k) fluoranthene	ND		mg/kg	0.00331	1	09/03/07 05:54	SW846 8270CSIN	7085875
Chrysene	ND		mg/kg	0.00331	1	09/03/07 05:54	SW846 8270CSIN	7085875
Dibenz (a,h) anthracene	ND		mg/kg	0.00331	1	09/03/07 05:54	SW846 8270CSIN	7085875
Fluoranthene	ND		mg/kg	0.00331	1	09/03/07 05:54	SW846 8270CSIN	7085875
Fluorene	ND		mg/kg	0.00331	1	09/03/07 05:54	SW846 8270CSIN	7085875
Indeno (1,2,3-cd) pyrene	ND		mg/kg	0.00331	1	09/03/07 05:54	SW846 8270CSIN	7085875
2-Methylnaphthalene	ND		mg/kg	0.00331	1	09/03/07 05:54	SW846 8270CSIN	7085875
Naphthalene	ND		mg/kg	0.00331	1	09/03/07 05:54	SW846 8270CSIN	7085875
Phenanthrene	ND		mg/kg	0.00331	1	09/03/07 05:54	SW846 8270CSIN	7085875
Pyrene	ND		mg/kg	0.00331	1	09/03/07 05:54	SW846 8270CSIN	7085875
Surr: Nitrobenzene-d5 (34-87%)	91 %	Z10				09/03/07 05:54	SW846 8270CSIN	7085875
Surr: 2-Fluorobiphenyl (30-93%)	77 %					09/03/07 05:54	SW846 8270CSIN	7085875
Surr: Terphenyl-d14 (49-123%)	99 %					09/03/07 05:54	SW846 8270CSIN	7085875

Extractable Petroleum Hydrocarbons

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NQH3608-01 (TKSB-1-8 - Soil) - cont. Sampled: 08/27/07 11:15								
Extractable Petroleum Hydrocarbons - cont.								
Diesel	ND		mg/kg	3.89	1	09/02/07 00:06	NWTPH-Dx	7085991
Motor Oil	ND		mg/kg	3.89	1	09/02/07 00:06	NWTPH-Dx	7085991
Surr: o-Terphenyl (50-150%)	118 %					09/02/07 00:06	NWTPH-Dx	7085991
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		mg/kg	4.84	50	09/06/07 04:07	NWTPH-Gx	7090910
Surr: a,a,a-Trifluorotoluene (52-145%)	95 %					09/06/07 04:07	NWTPH-Gx	7090910
Sample ID: NQH3608-02 (TKSB-1 - Ground Water) Sampled: 08/27/07 11:15								
Dissolved Metals by EPA Method 6010B								
Lead	ND		mg/L	0.00500	1	09/06/07 00:19	SW846 6010B	7090249
Volatile Organic Compounds by EPA Method 8260B								
Tert-Amyl Methyl Ether	ND		ug/L	1.00	1	09/05/07 10:15	SW846 8260B	7090635
Ethyl tert-Butyl Ether	ND		ug/L	1.00	1	09/05/07 10:15	SW846 8260B	7090635
Diisopropyl Ether	ND		ug/L	1.00	1	09/05/07 10:15	SW846 8260B	7090635
Benzene	ND		ug/L	1.00	1	09/07/07 23:45	SW846 8260B	7091613
Tertiary Butyl Alcohol	ND		ug/L	20.0	1	09/05/07 10:15	SW846 8260B	7090635
1,2-Dibromoethane (EDB)	ND		ug/L	1.00	1	09/07/07 23:45	SW846 8260B	7091613
1,2-Dichloroethane	ND		ug/L	1.00	1	09/07/07 23:45	SW846 8260B	7091613
Ethylbenzene	ND		ug/L	1.00	1	09/07/07 23:45	SW846 8260B	7091613
Isopropylbenzene	ND		ug/L	1.00	1	09/07/07 23:45	SW846 8260B	7091613
Methyl tert-Butyl Ether	ND		ug/L	1.00	1	09/07/07 23:45	SW846 8260B	7091613
n-Propylbenzene	ND		ug/L	1.00	1	09/07/07 23:45	SW846 8260B	7091613
Toluene	ND		ug/L	1.00	1	09/07/07 23:45	SW846 8260B	7091613
1,3,5-Trimethylbenzene	ND		ug/L	1.00	1	09/07/07 23:45	SW846 8260B	7091613
1,2,4-Trimethylbenzene	ND		ug/L	1.00	1	09/07/07 23:45	SW846 8260B	7091613
Xylenes, total	ND		ug/L	3.00	1	09/07/07 23:45	SW846 8260B	7091613
Surr: 1,2-Dichloroethane-d4 (62-142%)	87 %					09/07/07 23:45	SW846 8260B	7091613
Surr: Dibromofluoromethane (78-123%)	90 %					09/07/07 23:45	SW846 8260B	7091613
Surr: Toluene-d8 (79-120%)	91 %					09/07/07 23:45	SW846 8260B	7091613
Surr: 4-Bromofluorobenzene (75-133%)	98 %					09/07/07 23:45	SW846 8260B	7091613
Polyaromatic Hydrocarbons by EPA 8270C SIM								
Acenaphthene	ND		ug/L	0.120	1	09/05/07 00:57	SW846 8270CSIN	7085854
Acenaphthylene	ND		ug/L	0.120	1	09/05/07 00:57	SW846 8270CSIN	7085854
Anthracene	ND		ug/L	0.120	1	09/05/07 00:57	SW846 8270CSIN	7085854
Benzo (a) anthracene	ND		ug/L	0.120	1	09/05/07 00:57	SW846 8270CSIN	7085854
Benzo (a) pyrene	ND		ug/L	0.120	1	09/05/07 00:57	SW846 8270CSIN	7085854
Benzo (b) fluoranthene	ND		ug/L	0.120	1	09/05/07 00:57	SW846 8270CSIN	7085854
Benzo (g,h,i) perylene	ND		ug/L	0.120	1	09/05/07 00:57	SW846 8270CSIN	7085854
Benzo (k) fluoranthene	ND		ug/L	0.120	1	09/05/07 00:57	SW846 8270CSIN	7085854
Chrysene	ND		ug/L	0.120	1	09/05/07 00:57	SW846 8270CSIN	7085854
Dibenz (a,h) anthracene	ND		ug/L	0.120	1	09/05/07 00:57	SW846 8270CSIN	7085854
Fluoranthene	ND		ug/L	0.120	1	09/05/07 00:57	SW846 8270CSIN	7085854

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NQH3608-02 (TKSB-1 - Ground Water) - cont. Sampled: 08/27/07 11:15								
Polyaromatic Hydrocarbons by EPA 8270C SIM - cont.								
Fluorene	ND		ug/L	0.120	1	09/05/07 00:57	SW846 8270CSIM	7085854
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.120	1	09/05/07 00:57	SW846 8270CSIM	7085854
2-Methylnaphthalene	ND		ug/L	0.120	1	09/05/07 00:57	SW846 8270CSIM	7085854
Naphthalene	ND		ug/L	0.120	1	09/05/07 00:57	SW846 8270CSIM	7085854
Phenanthrene	ND		ug/L	0.120	1	09/05/07 00:57	SW846 8270CSIM	7085854
Pyrene	ND		ug/L	0.120	1	09/05/07 00:57	SW846 8270CSIM	7085854
Surr: Nitrobenzene-d5 (24-125%)	95 %					09/05/07 00:57	SW846 8270CSIM	7085854
Surr: 2-Fluorobiphenyl (30-120%)	88 %					09/05/07 00:57	SW846 8270CSIM	7085854
Surr: Terphenyl-d14 (29-149%)	82 %					09/05/07 00:57	SW846 8270CSIM	7085854
Extractable Petroleum Hydrocarbons								
Diesel	ND		ug/L	95.7	1	09/01/07 23:16	NWTPH-Dx	7085915
Motor Oil	149	QP1, QP6	ug/L	95.7	1	09/01/07 23:16	NWTPH-Dx	7085915
Surr: o-Terphenyl (50-150%)	79 %					09/01/07 23:16	NWTPH-Dx	7085915
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		ug/L	100	1	09/06/07 01:17	NWTPH-Gx	7090564
Surr: a,a,a-Trifluorotoluene (46-153%)	83 %					09/06/07 01:17	NWTPH-Gx	7090564
Sample ID: NQH3608-03 (TKSB-3-8 - Soil) Sampled: 08/27/07 10:00								
Total Metals by EPA Method 6010B								
Lead	6.80		mg/kg	0.954	1	09/07/07 08:26	SW846 6010B	7085913
Volatile Organic Compounds by EPA Method 8260B								
Tertiary Butyl Alcohol	ND		mg/kg	0.0496	1	09/08/07 02:46	SW846 8260B	7090348
Diisopropyl Ether	ND		mg/kg	0.00198	1	09/08/07 02:46	SW846 8260B	7090348
Ethyl tert-Butyl Ether	ND		mg/kg	0.00496	1	09/08/07 02:46	SW846 8260B	7090348
Tert-Amyl Methyl Ether	ND		mg/kg	0.00198	1	09/08/07 02:46	SW846 8260B	7090348
Benzene	ND		mg/kg	0.00198	1	09/08/07 02:46	SW846 8260B	7090348
1,2-Dibromoethane (EDB)	ND		mg/kg	0.00198	1	09/08/07 02:46	SW846 8260B	7090348
1,2-Dichloroethane	ND		mg/kg	0.00198	1	09/08/07 02:46	SW846 8260B	7090348
Ethylbenzene	ND		mg/kg	0.00198	1	09/08/07 02:46	SW846 8260B	7090348
Isopropylbenzene	ND		mg/kg	0.00198	1	09/08/07 02:46	SW846 8260B	7090348
Methyl tert-Butyl Ether	ND		mg/kg	0.00198	1	09/08/07 02:46	SW846 8260B	7090348
n-Propylbenzene	ND		mg/kg	0.00198	1	09/08/07 02:46	SW846 8260B	7090348
Toluene	ND		mg/kg	0.00198	1	09/08/07 02:46	SW846 8260B	7090348
1,3,5-Trimethylbenzene	ND		mg/kg	0.00198	1	09/08/07 02:46	SW846 8260B	7090348
1,2,4-Trimethylbenzene	ND		mg/kg	0.00198	1	09/08/07 02:46	SW846 8260B	7090348
Xylenes, total	ND		mg/kg	0.00496	1	09/08/07 02:46	SW846 8260B	7090348
Surr: 1,2-Dichloroethane-d4 (54-145%)	102 %					09/08/07 02:46	SW846 8260B	7090348
Surr: Dibromofluoromethane (67-129%)	103 %					09/08/07 02:46	SW846 8260B	7090348
Surr: Toluene-d8 (66-142%)	98 %					09/08/07 02:46	SW846 8260B	7090348
Surr: 4-Bromofluorobenzene (68-150%)	95 %					09/08/07 02:46	SW846 8260B	7090348
Polyaromatic Hydrocarbons by EPA 8270C SIM								
Acenaphthene	ND		mg/kg	0.00324	1	09/03/07 06:14	SW846 8270CSIM	7085875

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NQH3608-03 (TKSB-3-8 - Soil) - cont. Sampled: 08/27/07 10:00								
Polyaromatic Hydrocarbons by EPA 8270C SIM - cont.								
Acenaphthylene	ND		mg/kg	0.00324	1	09/03/07 06:14	SW846 8270CSIN	7085875
Anthracene	ND		mg/kg	0.00324	1	09/03/07 06:14	SW846 8270CSIN	7085875
Benzo (a) anthracene	ND		mg/kg	0.00324	1	09/03/07 06:14	SW846 8270CSIN	7085875
Benzo (a) pyrene	ND		mg/kg	0.00324	1	09/03/07 06:14	SW846 8270CSIN	7085875
Benzo (b) fluoranthene	ND		mg/kg	0.00324	1	09/03/07 06:14	SW846 8270CSIN	7085875
Benzo (g,h,i) perylene	ND		mg/kg	0.00324	1	09/03/07 06:14	SW846 8270CSIN	7085875
Benzo (k) fluoranthene	ND		mg/kg	0.00324	1	09/03/07 06:14	SW846 8270CSIN	7085875
Chrysene	ND		mg/kg	0.00324	1	09/03/07 06:14	SW846 8270CSIN	7085875
Dibenz (a,h) anthracene	ND		mg/kg	0.00324	1	09/03/07 06:14	SW846 8270CSIN	7085875
Fluoranthene	ND		mg/kg	0.00324	1	09/03/07 06:14	SW846 8270CSIN	7085875
Fluorene	ND		mg/kg	0.00324	1	09/03/07 06:14	SW846 8270CSIN	7085875
Indeno (1,2,3-cd) pyrene	ND		mg/kg	0.00324	1	09/03/07 06:14	SW846 8270CSIN	7085875
2-Methylnaphthalene	ND		mg/kg	0.00324	1	09/03/07 06:14	SW846 8270CSIN	7085875
Naphthalene	ND		mg/kg	0.00324	1	09/03/07 06:14	SW846 8270CSIN	7085875
Phenanthrene	ND		mg/kg	0.00324	1	09/03/07 06:14	SW846 8270CSIN	7085875
Pyrene	ND		mg/kg	0.00324	1	09/03/07 06:14	SW846 8270CSIN	7085875
Surr: Nitrobenzene-d5 (34-87%)	95 %	Z10				09/03/07 06:14	SW846 8270CSIN	7085875
Surr: 2-Fluorobiphenyl (30-93%)	81 %					09/03/07 06:14	SW846 8270CSIN	7085875
Surr: Terphenyl-d14 (49-123%)	95 %					09/03/07 06:14	SW846 8270CSIN	7085875
Extractable Petroleum Hydrocarbons								
Diesel	ND		mg/kg	3.95	1	09/02/07 00:22	NWTPH-Dx	7085991
Motor Oil	ND		mg/kg	3.95	1	09/02/07 00:22	NWTPH-Dx	7085991
Surr: o-Terphenyl (50-150%)	96 %					09/02/07 00:22	NWTPH-Dx	7085991
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		mg/kg	4.95	50	09/07/07 11:36	NWTPH-Gx	7090910
Surr: a,a,a-Trifluorotoluene (52-145%)	95 %					09/07/07 11:36	NWTPH-Gx	7090910
Sample ID: NQH3608-04 (TKSB-3 - Ground Water) Sampled: 08/27/07 10:00								
Dissolved Metals by EPA Method 6010B								
Lead	ND		mg/L	0.00500	1	09/06/07 00:24	SW846 6010B	7090249
Volatile Organic Compounds by EPA Method 8260B								
Tert-Amyl Methyl Ether	ND		ug/L	1.00	1	09/05/07 10:40	SW846 8260B	7090635
Ethyl tert-Butyl Ether	ND		ug/L	1.00	1	09/05/07 10:40	SW846 8260B	7090635
Diisopropyl Ether	ND		ug/L	1.00	1	09/05/07 10:40	SW846 8260B	7090635
Benzene	2.13		ug/L	1.00	1	09/05/07 10:40	SW846 8260B	7090635
Tertiary Butyl Alcohol	ND		ug/L	20.0	1	09/05/07 10:40	SW846 8260B	7090635
1,2-Dibromoethane (EDB)	ND		ug/L	1.00	1	09/05/07 10:40	SW846 8260B	7090635
1,2-Dichloroethane	ND		ug/L	1.00	1	09/05/07 10:40	SW846 8260B	7090635
Ethylbenzene	119		ug/L	1.00	1	09/05/07 10:40	SW846 8260B	7090635
Isopropylbenzene	5.66		ug/L	1.00	1	09/08/07 00:11	SW846 8260B	7091613
Methyl tert-Butyl Ether	ND		ug/L	1.00	1	09/05/07 10:40	SW846 8260B	7090635
n-Propylbenzene	14.5		ug/L	1.00	1	09/08/07 00:11	SW846 8260B	7091613

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NQH3608-04 (TKSB-3 - Ground Water) - cont. Sampled: 08/27/07 10:00								
Volatile Organic Compounds by EPA Method 8260B - cont.								
Toluene	3.50		ug/L	1.00	1	09/05/07 10:40	SW846 8260B	7090635
1,3,5-Trimethylbenzene	19.9		ug/L	1.00	1	09/08/07 00:11	SW846 8260B	7091613
1,2,4-Trimethylbenzene	25.0		ug/L	1.00	1	09/08/07 00:11	SW846 8260B	7091613
Xylenes, total	40.2		ug/L	3.00	1	09/05/07 10:40	SW846 8260B	7090635
Surr: 1,2-Dichloroethane-d4 (62-142%)	105 %					09/05/07 10:40	SW846 8260B	7090635
Surr: 1,2-Dichloroethane-d4 (62-142%)	88 %					09/08/07 00:11	SW846 8260B	7091613
Surr: Dibromofluoromethane (78-123%)	96 %					09/05/07 10:40	SW846 8260B	7090635
Surr: Dibromofluoromethane (78-123%)	91 %					09/08/07 00:11	SW846 8260B	7091613
Surr: Toluene-d8 (79-120%)	99 %					09/05/07 10:40	SW846 8260B	7090635
Surr: Toluene-d8 (79-120%)	92 %					09/08/07 00:11	SW846 8260B	7091613
Surr: 4-Bromofluorobenzene (75-133%)	93 %					09/05/07 10:40	SW846 8260B	7090635
Surr: 4-Bromofluorobenzene (75-133%)	95 %					09/08/07 00:11	SW846 8260B	7091613
Polyaromatic Hydrocarbons by EPA 8270C SIM								
Acenaphthene	ND		ug/L	0.0962	1	09/05/07 01:17	SW846 8270CSIN	7085854
Acenaphthylene	ND		ug/L	0.0962	1	09/05/07 01:17	SW846 8270CSIN	7085854
Anthracene	ND		ug/L	0.0962	1	09/05/07 01:17	SW846 8270CSIN	7085854
Benzo (a) anthracene	ND		ug/L	0.0962	1	09/05/07 01:17	SW846 8270CSIN	7085854
Benzo (a) pyrene	ND		ug/L	0.0962	1	09/05/07 01:17	SW846 8270CSIN	7085854
Benzo (b) fluoranthene	ND		ug/L	0.0962	1	09/05/07 01:17	SW846 8270CSIN	7085854
Benzo (g,h,i) perylene	ND		ug/L	0.0962	1	09/05/07 01:17	SW846 8270CSIN	7085854
Benzo (k) fluoranthene	ND		ug/L	0.0962	1	09/05/07 01:17	SW846 8270CSIN	7085854
Chrysene	ND		ug/L	0.0962	1	09/05/07 01:17	SW846 8270CSIN	7085854
Dibenz (a,h) anthracene	ND		ug/L	0.0962	1	09/05/07 01:17	SW846 8270CSIN	7085854
Fluoranthene	ND		ug/L	0.0962	1	09/05/07 01:17	SW846 8270CSIN	7085854
Fluorene	ND		ug/L	0.0962	1	09/05/07 01:17	SW846 8270CSIN	7085854
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0962	1	09/05/07 01:17	SW846 8270CSIN	7085854
2-Methylnaphthalene	12.3		ug/L	0.385	4	09/05/07 11:07	SW846 8270CSIN	7085854
Naphthalene	17.8		ug/L	0.385	4	09/05/07 11:07	SW846 8270CSIN	7085854
Phenanthrene	ND		ug/L	0.0962	1	09/05/07 01:17	SW846 8270CSIN	7085854
Pyrene	ND		ug/L	0.0962	1	09/05/07 01:17	SW846 8270CSIN	7085854
Surr: Nitrobenzene-d5 (24-125%)	98 %					09/05/07 01:17	SW846 8270CSIN	7085854
Surr: 2-Fluorobiphenyl (30-120%)	85 %					09/05/07 01:17	SW846 8270CSIN	7085854
Surr: Terphenyl-d14 (29-149%)	79 %					09/05/07 01:17	SW846 8270CSIN	7085854
Extractable Petroleum Hydrocarbons								
Diesel	249	QP3a, QP6	ug/L	95.7	1	09/01/07 23:33	NWTPH-Dx	7085915
Motor Oil	ND		ug/L	95.7	1	09/01/07 23:33	NWTPH-Dx	7085915
Surr: o-Terphenyl (50-150%)	96 %					09/01/07 23:33	NWTPH-Dx	7085915
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	1200		ug/L	100	1	09/06/07 01:45	NWTPH-Gx	7090564
Surr: a,a,a-Trifluorotoluene (46-153%)	88 %					09/06/07 01:45	NWTPH-Gx	7090564

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NQH3608-05 (DSSB-4-8 - Soil) Sampled: 08/27/07 09:30								
Total Metals by EPA Method 6010B								
Lead	6.63		mg/kg	1.00	1	09/07/07 08:30	SW846 6010B	7085913
Volatile Organic Compounds by EPA Method 8260B								
Tertiary Butyl Alcohol	ND		mg/kg	0.0491	1	09/08/07 03:17	SW846 8260B	7090348
Diisopropyl Ether	ND		mg/kg	0.00196	1	09/08/07 03:17	SW846 8260B	7090348
Ethyl tert-Butyl Ether	ND		mg/kg	0.00491	1	09/08/07 03:17	SW846 8260B	7090348
Tert-Amyl Methyl Ether	ND		mg/kg	0.00196	1	09/08/07 03:17	SW846 8260B	7090348
Benzene	ND		mg/kg	0.00196	1	09/08/07 03:17	SW846 8260B	7090348
1,2-Dibromoethane (EDB)	ND		mg/kg	0.00196	1	09/08/07 03:17	SW846 8260B	7090348
1,2-Dichloroethane	ND		mg/kg	0.00196	1	09/08/07 03:17	SW846 8260B	7090348
Ethylbenzene	ND		mg/kg	0.00196	1	09/08/07 03:17	SW846 8260B	7090348
Isopropylbenzene	ND		mg/kg	0.00196	1	09/08/07 03:17	SW846 8260B	7090348
Methyl tert-Butyl Ether	ND		mg/kg	0.00196	1	09/08/07 03:17	SW846 8260B	7090348
n-Propylbenzene	ND		mg/kg	0.00196	1	09/08/07 03:17	SW846 8260B	7090348
Toluene	ND		mg/kg	0.00196	1	09/08/07 03:17	SW846 8260B	7090348
1,3,5-Trimethylbenzene	ND		mg/kg	0.00196	1	09/08/07 03:17	SW846 8260B	7090348
1,2,4-Trimethylbenzene	ND		mg/kg	0.00196	1	09/08/07 03:17	SW846 8260B	7090348
Xylenes, total	ND		mg/kg	0.00491	1	09/08/07 03:17	SW846 8260B	7090348
Surr: 1,2-Dichloroethane-d4 (54-145%)	102 %					09/08/07 03:17	SW846 8260B	7090348
Surr: Dibromofluoromethane (67-129%)	104 %					09/08/07 03:17	SW846 8260B	7090348
Surr: Toluene-d8 (66-142%)	98 %					09/08/07 03:17	SW846 8260B	7090348
Surr: 4-Bromofluorobenzene (68-150%)	94 %					09/08/07 03:17	SW846 8260B	7090348
Polyaromatic Hydrocarbons by EPA 8270C SIM								
Acenaphthene	ND		mg/kg	0.00329	1	09/03/07 06:34	SW846 8270CSIN	7085875
Acenaphthylene	ND		mg/kg	0.00329	1	09/03/07 06:34	SW846 8270CSIN	7085875
Anthracene	ND		mg/kg	0.00329	1	09/03/07 06:34	SW846 8270CSIN	7085875
Benzo (a) anthracene	ND		mg/kg	0.00329	1	09/03/07 06:34	SW846 8270CSIN	7085875
Benzo (a) pyrene	ND		mg/kg	0.00329	1	09/03/07 06:34	SW846 8270CSIN	7085875
Benzo (b) fluoranthene	ND		mg/kg	0.00329	1	09/03/07 06:34	SW846 8270CSIN	7085875
Benzo (g,h,i) perylene	ND		mg/kg	0.00329	1	09/03/07 06:34	SW846 8270CSIN	7085875
Benzo (k) fluoranthene	ND		mg/kg	0.00329	1	09/03/07 06:34	SW846 8270CSIN	7085875
Chrysene	ND		mg/kg	0.00329	1	09/03/07 06:34	SW846 8270CSIN	7085875
Dibenz (a,h) anthracene	ND		mg/kg	0.00329	1	09/03/07 06:34	SW846 8270CSIN	7085875
Fluoranthene	ND		mg/kg	0.00329	1	09/03/07 06:34	SW846 8270CSIN	7085875
Fluorene	ND		mg/kg	0.00329	1	09/03/07 06:34	SW846 8270CSIN	7085875
Indeno (1,2,3-cd) pyrene	ND		mg/kg	0.00329	1	09/03/07 06:34	SW846 8270CSIN	7085875
2-Methylnaphthalene	ND		mg/kg	0.00329	1	09/03/07 06:34	SW846 8270CSIN	7085875
Naphthalene	ND		mg/kg	0.00329	1	09/03/07 06:34	SW846 8270CSIN	7085875
Phenanthrene	ND		mg/kg	0.00329	1	09/03/07 06:34	SW846 8270CSIN	7085875
Pyrene	ND		mg/kg	0.00329	1	09/03/07 06:34	SW846 8270CSIN	7085875
Surr: Nitrobenzene-d5 (34-87%)	93 %	Z10				09/03/07 06:34	SW846 8270CSIA	7085875
Surr: 2-Fluorobiphenyl (30-93%)	80 %					09/03/07 06:34	SW846 8270CSIA	7085875
Surr: Terphenyl-d14 (49-123%)	93 %					09/03/07 06:34	SW846 8270CSIA	7085875

Extractable Petroleum Hydrocarbons

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NQH3608-05 (DSSB-4-8 - Soil) - cont. Sampled: 08/27/07 09:30								
Extractable Petroleum Hydrocarbons - cont.								
Diesel	ND		mg/kg	3.91	1	09/02/07 00:37	NWTPH-Dx	7085991
Motor Oil	ND		mg/kg	3.91	1	09/02/07 00:37	NWTPH-Dx	7085991
Surr: o-Terphenyl (50-150%)	93 %					09/02/07 00:37	NWTPH-Dx	7085991
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		mg/kg	4.99	50	09/06/07 05:31	NWTPH-Gx	7090910
Surr: a,a,a-Trifluorotoluene (52-145%)	94 %					09/06/07 05:31	NWTPH-Gx	7090910
Sample ID: NQH3608-06 (DSSB-4 - Ground Water) Sampled: 08/27/07 09:30								
Dissolved Metals by EPA Method 6010B								
Lead	ND		mg/L	0.00500	1	09/06/07 00:28	SW846 6010B	7090249
Volatile Organic Compounds by EPA Method 8260B								
Tert-Amyl Methyl Ether	ND		ug/L	1.00	1	09/05/07 11:04	SW846 8260B	7090635
Ethyl tert-Butyl Ether	ND		ug/L	1.00	1	09/05/07 11:04	SW846 8260B	7090635
Diisopropyl Ether	ND		ug/L	1.00	1	09/05/07 11:04	SW846 8260B	7090635
Benzene	2.71		ug/L	1.00	1	09/05/07 11:04	SW846 8260B	7090635
Tertiary Butyl Alcohol	ND		ug/L	20.0	1	09/05/07 11:04	SW846 8260B	7090635
1,2-Dibromoethane (EDB)	ND		ug/L	1.00	1	09/05/07 11:04	SW846 8260B	7090635
1,2-Dichloroethane	ND		ug/L	1.00	1	09/05/07 11:04	SW846 8260B	7090635
Ethylbenzene	18.8		ug/L	1.00	1	09/05/07 11:04	SW846 8260B	7090635
Isopropylbenzene	4.31	H2	ug/L	1.00	1	09/10/07 17:36	SW846 8260B	7090180
Methyl tert-Butyl Ether	ND		ug/L	1.00	1	09/05/07 11:04	SW846 8260B	7090635
n-Propylbenzene	5.83	H2	ug/L	1.00	1	09/10/07 17:36	SW846 8260B	7090180
Toluene	ND		ug/L	1.00	1	09/05/07 11:04	SW846 8260B	7090635
1,3,5-Trimethylbenzene	6.07	H2	ug/L	1.00	1	09/10/07 17:36	SW846 8260B	7090180
1,2,4-Trimethylbenzene	ND		ug/L	1.00	1	09/05/07 11:04	SW846 8260B	7090635
Xylenes, total	ND		ug/L	3.00	1	09/05/07 11:04	SW846 8260B	7090635
Surr: 1,2-Dichloroethane-d4 (62-142%)	103 %					09/05/07 11:04	SW846 8260B	7090635
Surr: 1,2-Dichloroethane-d4 (62-142%)	96 %					09/10/07 17:36	SW846 8260B	7090180
Surr: Dibromofluoromethane (78-123%)	125 %	Z10				09/05/07 11:04	SW846 8260B	7090635
Surr: Dibromofluoromethane (78-123%)	97 %					09/10/07 17:36	SW846 8260B	7090180
Surr: Toluene-d8 (79-120%)	99 %					09/05/07 11:04	SW846 8260B	7090635
Surr: Toluene-d8 (79-120%)	105 %					09/10/07 17:36	SW846 8260B	7090180
Surr: 4-Bromofluorobenzene (75-133%)	92 %					09/05/07 11:04	SW846 8260B	7090635
Surr: 4-Bromofluorobenzene (75-133%)	98 %					09/10/07 17:36	SW846 8260B	7090180
Polyaromatic Hydrocarbons by EPA 8270C SIM								
Acenaphthene	ND		ug/L	0.106	1	09/05/07 01:37	SW846 8270CSIM	7085854
Acenaphthylene	ND		ug/L	0.106	1	09/05/07 01:37	SW846 8270CSIM	7085854
Anthracene	ND		ug/L	0.106	1	09/05/07 01:37	SW846 8270CSIM	7085854
Benzo (a) anthracene	ND		ug/L	0.106	1	09/05/07 01:37	SW846 8270CSIM	7085854
Benzo (a) pyrene	ND		ug/L	0.106	1	09/05/07 01:37	SW846 8270CSIM	7085854
Benzo (b) fluoranthene	ND		ug/L	0.106	1	09/05/07 01:37	SW846 8270CSIM	7085854
Benzo (g,h,i) perylene	ND		ug/L	0.106	1	09/05/07 01:37	SW846 8270CSIM	7085854
Benzo (k) fluoranthene	ND		ug/L	0.106	1	09/05/07 01:37	SW846 8270CSIM	7085854

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NQH3608-06 (DSSB-4 - Ground Water) - cont. Sampled: 08/27/07 09:30								
Polyaromatic Hydrocarbons by EPA 8270C SIM - cont.								
Chrysene	ND		ug/L	0.106	1	09/05/07 01:37	SW846 8270CSIM	7085854
Dibenz (a,h) anthracene	ND		ug/L	0.106	1	09/05/07 01:37	SW846 8270CSIM	7085854
Fluoranthene	ND		ug/L	0.106	1	09/05/07 01:37	SW846 8270CSIM	7085854
Fluorene	ND		ug/L	0.106	1	09/05/07 01:37	SW846 8270CSIM	7085854
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.106	1	09/05/07 01:37	SW846 8270CSIM	7085854
2-Methylnaphthalene	2.59		ug/L	0.106	1	09/05/07 01:37	SW846 8270CSIM	7085854
Naphthalene	4.41		ug/L	0.106	1	09/05/07 01:37	SW846 8270CSIM	7085854
Phenanthrene	ND		ug/L	0.106	1	09/05/07 01:37	SW846 8270CSIM	7085854
Pyrene	ND		ug/L	0.106	1	09/05/07 01:37	SW846 8270CSIM	7085854
Surr: Nitrobenzene-d5 (24-125%)	96 %					09/05/07 01:37	SW846 8270CSIM	7085854
Surr: 2-Fluorobiphenyl (30-120%)	89 %					09/05/07 01:37	SW846 8270CSIM	7085854
Surr: Terphenyl-d14 (29-149%)	80 %					09/05/07 01:37	SW846 8270CSIM	7085854
Extractable Petroleum Hydrocarbons								
Diesel	398	QP3, QP6	ug/L	96.2	1	09/01/07 23:51	NWTPH-Dx	7085915
Motor Oil	ND		ug/L	96.2	1	09/01/07 23:51	NWTPH-Dx	7085915
Surr: o-Terphenyl (50-150%)	99 %					09/01/07 23:51	NWTPH-Dx	7085915
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	1370		ug/L	100	1	09/06/07 02:13	NWTPH-Gx	7090564
Surr: a,a,a-Trifluorotoluene (46-153%)	92 %					09/06/07 02:13	NWTPH-Gx	7090564
Sample ID: NQH3608-07 (DSSB-5-10 - Soil) Sampled: 08/27/07 12:30								
Total Metals by EPA Method 6010B								
Lead	5.78		mg/kg	1.01	1	09/07/07 08:37	SW846 6010B	7085913
Volatile Organic Compounds by EPA Method 8260B								
Tertiary Butyl Alcohol	ND		mg/kg	0.0485	1	09/08/07 03:48	SW846 8260B	7090348
Diisopropyl Ether	ND		mg/kg	0.00194	1	09/08/07 03:48	SW846 8260B	7090348
Ethyl tert-Butyl Ether	ND		mg/kg	0.00485	1	09/08/07 03:48	SW846 8260B	7090348
Tert-Amyl Methyl Ether	ND		mg/kg	0.00194	1	09/08/07 03:48	SW846 8260B	7090348
Benzene	ND		mg/kg	0.00194	1	09/08/07 03:48	SW846 8260B	7090348
1,2-Dibromoethane (EDB)	ND		mg/kg	0.00194	1	09/08/07 03:48	SW846 8260B	7090348
1,2-Dichloroethane	ND		mg/kg	0.00194	1	09/08/07 03:48	SW846 8260B	7090348
Ethylbenzene	ND		mg/kg	0.00194	1	09/08/07 03:48	SW846 8260B	7090348
Isopropylbenzene	ND		mg/kg	0.00194	1	09/08/07 03:48	SW846 8260B	7090348
Methyl tert-Butyl Ether	ND		mg/kg	0.00194	1	09/08/07 03:48	SW846 8260B	7090348
n-Propylbenzene	ND		mg/kg	0.00194	1	09/08/07 03:48	SW846 8260B	7090348
Toluene	ND		mg/kg	0.00194	1	09/08/07 03:48	SW846 8260B	7090348
1,3,5-Trimethylbenzene	0.00227		mg/kg	0.00194	1	09/08/07 03:48	SW846 8260B	7090348
1,2,4-Trimethylbenzene	0.00830		mg/kg	0.00194	1	09/08/07 03:48	SW846 8260B	7090348
Xylenes, total	ND		mg/kg	0.00485	1	09/08/07 03:48	SW846 8260B	7090348
Surr: 1,2-Dichloroethane-d4 (54-145%)	104 %					09/08/07 03:48	SW846 8260B	7090348
Surr: Dibromofluoromethane (67-129%)	106 %					09/08/07 03:48	SW846 8260B	7090348
Surr: Toluene-d8 (66-142%)	98 %					09/08/07 03:48	SW846 8260B	7090348
Surr: 4-Bromofluorobenzene (68-150%)	96 %					09/08/07 03:48	SW846 8260B	7090348

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NQH3608-07 (DSSB-5-10 - Soil) - cont. Sampled: 08/27/07 12:30								
Polyaromatic Hydrocarbons by EPA 8270C SIM								
Acenaphthene	ND		mg/kg	0.00326	1	09/03/07 07:30	SW846 8270CSIM	7085875
Acenaphthylene	ND		mg/kg	0.00326	1	09/03/07 07:30	SW846 8270CSIM	7085875
Anthracene	ND		mg/kg	0.00326	1	09/03/07 07:30	SW846 8270CSIM	7085875
Benzo (a) anthracene	ND		mg/kg	0.00326	1	09/03/07 07:30	SW846 8270CSIM	7085875
Benzo (a) pyrene	ND		mg/kg	0.00326	1	09/03/07 07:30	SW846 8270CSIM	7085875
Benzo (b) fluoranthene	ND		mg/kg	0.00326	1	09/03/07 07:30	SW846 8270CSIM	7085875
Benzo (g,h,i) perylene	ND		mg/kg	0.00326	1	09/03/07 07:30	SW846 8270CSIM	7085875
Benzo (k) fluoranthene	ND		mg/kg	0.00326	1	09/03/07 07:30	SW846 8270CSIM	7085875
Chrysene	ND		mg/kg	0.00326	1	09/03/07 07:30	SW846 8270CSIM	7085875
Dibenz (a,h) anthracene	ND		mg/kg	0.00326	1	09/03/07 07:30	SW846 8270CSIM	7085875
Fluoranthene	ND		mg/kg	0.00326	1	09/03/07 07:30	SW846 8270CSIM	7085875
Fluorene	ND		mg/kg	0.00326	1	09/03/07 07:30	SW846 8270CSIM	7085875
Indeno (1,2,3-cd) pyrene	ND		mg/kg	0.00326	1	09/03/07 07:30	SW846 8270CSIM	7085875
2-Methylnaphthalene	ND		mg/kg	0.00326	1	09/03/07 07:30	SW846 8270CSIM	7085875
Naphthalene	ND		mg/kg	0.00326	1	09/03/07 07:30	SW846 8270CSIM	7085875
Phenanthrene	ND		mg/kg	0.00326	1	09/03/07 07:30	SW846 8270CSIM	7085875
Pyrene	ND		mg/kg	0.00326	1	09/03/07 07:30	SW846 8270CSIM	7085875
Surr: Nitrobenzene-d5 (34-87%)	95 %	Z10				09/03/07 07:30	SW846 8270CSIA	7085875
Surr: 2-Fluorobiphenyl (30-93%)	81 %					09/03/07 07:30	SW846 8270CSIA	7085875
Surr: Terphenyl-d14 (49-123%)	95 %					09/03/07 07:30	SW846 8270CSIA	7085875
Extractable Petroleum Hydrocarbons								
Diesel	ND		mg/kg	3.96	1	09/02/07 00:53	NWTPH-Dx	7085991
Motor Oil	ND		mg/kg	3.96	1	09/02/07 00:53	NWTPH-Dx	7085991
Surr: o-Terphenyl (50-150%)	93 %					09/02/07 00:53	NWTPH-Dx	7085991
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	28.5		mg/kg	4.97	50	09/06/07 15:07	NWTPH-Gx	7090910
Surr: a,a,a-Trifluorotoluene (52-145%)	93 %					09/06/07 15:07	NWTPH-Gx	7090910

Sample ID: NQH3608-08 (DSSB-5 - Ground Water) Sampled: 08/27/07 12:30

Dissolved Metals by EPA Method 6010B								
Lead	ND		mg/L	0.00500	1	09/06/07 00:33	SW846 6010B	7090249
Volatile Organic Compounds by EPA Method 8260B								
Tert-Amyl Methyl Ether	ND		ug/L	1.00	1	09/05/07 11:29	SW846 8260B	7090635
Ethyl tert-Butyl Ether	ND		ug/L	1.00	1	09/05/07 11:29	SW846 8260B	7090635
Diisopropyl Ether	ND		ug/L	1.00	1	09/05/07 11:29	SW846 8260B	7090635
Benzene	ND		ug/L	1.00	1	09/05/07 11:29	SW846 8260B	7090635
Tertiary Butyl Alcohol	ND		ug/L	20.0	1	09/05/07 11:29	SW846 8260B	7090635
1,2-Dibromoethane (EDB)	ND		ug/L	1.00	1	09/05/07 11:29	SW846 8260B	7090635
1,2-Dichloroethane	ND		ug/L	1.00	1	09/05/07 11:29	SW846 8260B	7090635
Ethylbenzene	ND		ug/L	1.00	1	09/05/07 11:29	SW846 8260B	7090635
Isopropylbenzene	ND		ug/L	1.00	1	09/05/07 11:29	SW846 8260B	7090635
Methyl tert-Butyl Ether	ND		ug/L	1.00	1	09/05/07 11:29	SW846 8260B	7090635

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NQH3608-08 (DSSB-5 - Ground Water) - cont. Sampled: 08/27/07 12:30								
Volatile Organic Compounds by EPA Method 8260B - cont.								
n-Propylbenzene	ND		ug/L	1.00	1	09/05/07 11:29	SW846 8260B	7090635
Toluene	ND		ug/L	1.00	1	09/05/07 11:29	SW846 8260B	7090635
1,3,5-Trimethylbenzene	ND		ug/L	1.00	1	09/05/07 11:29	SW846 8260B	7090635
1,2,4-Trimethylbenzene	ND		ug/L	1.00	1	09/05/07 11:29	SW846 8260B	7090635
Xylenes, total	ND		ug/L	3.00	1	09/05/07 11:29	SW846 8260B	7090635
Surr: 1,2-Dichloroethane-d4 (62-142%)	100 %					09/05/07 11:29	SW846 8260B	7090635
Surr: Dibromofluoromethane (78-123%)	96 %					09/05/07 11:29	SW846 8260B	7090635
Surr: Toluene-d8 (79-120%)	98 %					09/05/07 11:29	SW846 8260B	7090635
Surr: 4-Bromofluorobenzene (75-133%)	91 %					09/05/07 11:29	SW846 8260B	7090635
Polyaromatic Hydrocarbons by EPA 8270C SIM								
Acenaphthene	ND		ug/L	0.143	1	09/05/07 01:58	SW846 8270CSIN	7085854
Acenaphthylene	ND		ug/L	0.143	1	09/05/07 01:58	SW846 8270CSIN	7085854
Anthracene	ND		ug/L	0.143	1	09/05/07 01:58	SW846 8270CSIN	7085854
Benzo (a) anthracene	ND		ug/L	0.143	1	09/05/07 01:58	SW846 8270CSIN	7085854
Benzo (a) pyrene	ND		ug/L	0.143	1	09/05/07 01:58	SW846 8270CSIN	7085854
Benzo (b) fluoranthene	ND		ug/L	0.143	1	09/05/07 01:58	SW846 8270CSIN	7085854
Benzo (g,h,i) perylene	ND		ug/L	0.143	1	09/05/07 01:58	SW846 8270CSIN	7085854
Benzo (k) fluoranthene	ND		ug/L	0.143	1	09/05/07 01:58	SW846 8270CSIN	7085854
Chrysene	ND		ug/L	0.143	1	09/05/07 01:58	SW846 8270CSIN	7085854
Dibenz (a,h) anthracene	ND		ug/L	0.143	1	09/05/07 01:58	SW846 8270CSIN	7085854
Fluoranthene	ND		ug/L	0.143	1	09/05/07 01:58	SW846 8270CSIN	7085854
Fluorene	ND		ug/L	0.143	1	09/05/07 01:58	SW846 8270CSIN	7085854
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.143	1	09/05/07 01:58	SW846 8270CSIN	7085854
2-Methylnaphthalene	10.9		ug/L	0.143	1	09/05/07 01:58	SW846 8270CSIN	7085854
Naphthalene	15.2		ug/L	0.286	2	09/05/07 11:28	SW846 8270CSIN	7085854
Phenanthrene	ND		ug/L	0.143	1	09/05/07 01:58	SW846 8270CSIN	7085854
Pyrene	ND		ug/L	0.143	1	09/05/07 01:58	SW846 8270CSIN	7085854
Surr: Nitrobenzene-d5 (24-125%)	96 %					09/05/07 01:58	SW846 8270CSIN	7085854
Surr: 2-Fluorobiphenyl (30-120%)	93 %					09/05/07 01:58	SW846 8270CSIN	7085854
Surr: Terphenyl-d14 (29-149%)	89 %					09/05/07 01:58	SW846 8270CSIN	7085854
Extractable Petroleum Hydrocarbons								
Diesel	ND		ug/L	95.2	1	09/02/07 00:08	NWTPH-Dx	7085915
Motor Oil	ND		ug/L	95.2	1	09/02/07 00:08	NWTPH-Dx	7085915
Surr: o-Terphenyl (50-150%)	99 %					09/02/07 00:08	NWTPH-Dx	7085915
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		ug/L	100	1	09/06/07 02:41	NWTPH-Gx	7090564
Surr: a,a,a-Trifluorotoluene (46-153%)	86 %					09/06/07 02:41	NWTPH-Gx	7090564

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NQH3608-09 (Trip Blank - Ground Water) Sampled: 08/27/07 00:01								
Volatile Organic Compounds by EPA Method 8260B								
Tert-Amyl Methyl Ether	ND		ug/L	1.00	1	09/07/07 18:34	SW846 8260B	7091613
Ethyl tert-Butyl Ether	ND		ug/L	1.00	1	09/07/07 18:34	SW846 8260B	7091613
Diisopropyl Ether	ND		ug/L	1.00	1	09/07/07 18:34	SW846 8260B	7091613
Benzene	ND		ug/L	1.00	1	09/07/07 18:34	SW846 8260B	7091613
Tertiary Butyl Alcohol	ND		ug/L	20.0	1	09/07/07 18:34	SW846 8260B	7091613
1,2-Dibromoethane (EDB)	ND		ug/L	1.00	1	09/07/07 18:34	SW846 8260B	7091613
1,2-Dichloroethane	ND		ug/L	1.00	1	09/07/07 18:34	SW846 8260B	7091613
Ethylbenzene	ND		ug/L	1.00	1	09/07/07 18:34	SW846 8260B	7091613
Isopropylbenzene	ND		ug/L	1.00	1	09/07/07 18:34	SW846 8260B	7091613
Methyl tert-Butyl Ether	ND		ug/L	1.00	1	09/07/07 18:34	SW846 8260B	7091613
n-Propylbenzene	ND		ug/L	1.00	1	09/07/07 18:34	SW846 8260B	7091613
Toluene	ND		ug/L	1.00	1	09/07/07 18:34	SW846 8260B	7091613
1,3,5-Trimethylbenzene	ND		ug/L	1.00	1	09/07/07 18:34	SW846 8260B	7091613
1,2,4-Trimethylbenzene	ND		ug/L	1.00	1	09/07/07 18:34	SW846 8260B	7091613
Xylenes, total	ND		ug/L	3.00	1	09/07/07 18:34	SW846 8260B	7091613
Surr: 1,2-Dichloroethane-d4 (62-142%)	108 %					09/07/07 18:34	SW846 8260B	7091613
Surr: Dibromofluoromethane (78-123%)	100 %					09/07/07 18:34	SW846 8260B	7091613
Surr: Toluene-d8 (79-120%)	91 %					09/07/07 18:34	SW846 8260B	7091613
Surr: 4-Bromofluorobenzene (75-133%)	101 %					09/07/07 18:34	SW846 8260B	7091613

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Dissolved Metals by EPA Method 6010B							
SW846 6010B	7090249	NQH3608-02	50.00	50.00	09/04/07 08:53	JMR	EPA 3010A / 6010 D
SW846 6010B	7090249	NQH3608-04	50.00	50.00	09/04/07 08:53	JMR	EPA 3010A / 6010 D
SW846 6010B	7090249	NQH3608-06	50.00	50.00	09/04/07 08:53	JMR	EPA 3010A / 6010 D
SW846 6010B	7090249	NQH3608-08	50.00	50.00	09/04/07 08:53	JMR	EPA 3010A / 6010 D
Extractable Petroleum Hydrocarbons							
NWTPH-Dx	7085991	NQH3608-01	25.73	1.00	08/31/07 15:25	CDJ	EPA 3550B
NWTPH-Dx	7085915	NQH3608-02	1045.00	1.00	08/31/07 12:45	AML	EPA 3510C
NWTPH-Dx	7085991	NQH3608-03	25.30	1.00	08/31/07 15:25	CDJ	EPA 3550B
NWTPH-Dx	7085915	NQH3608-04	1045.00	1.00	08/31/07 12:45	AML	EPA 3510C
NWTPH-Dx	7085991	NQH3608-05	25.60	1.00	08/31/07 15:25	CDJ	EPA 3550B
NWTPH-Dx	7085915	NQH3608-06	1040.00	1.00	08/31/07 12:45	AML	EPA 3510C
NWTPH-Dx	7085991	NQH3608-07	25.28	1.00	08/31/07 15:25	CDJ	EPA 3550B
NWTPH-Dx	7085915	NQH3608-08	1050.00	1.00	08/31/07 12:45	AML	EPA 3510C
Polyaromatic Hydrocarbons by EPA 8270C SIM							
SW846 8270CSIM	7085875	NQH3608-01	30.17	1.00	08/31/07 09:58	CDJ	EPA 3550B
SW846 8270CSIM	7085854	NQH3608-02	830.00	1.00	08/31/07 12:00	KYH	EPA 3510C
SW846 8270CSIM	7085875	NQH3608-03	30.85	1.00	08/31/07 09:58	CDJ	EPA 3550B
SW846 8270CSIM	7085854	NQH3608-04	1040.00	1.00	08/31/07 12:00	KYH	EPA 3510C
SW846 8270CSIM	7085854	NQH3608-04RE1	1040.00	1.00	08/31/07 12:00	KYH	EPA 3510C
SW846 8270CSIM	7085875	NQH3608-05	30.35	1.00	08/31/07 09:58	CDJ	EPA 3550B
SW846 8270CSIM	7085854	NQH3608-06	940.00	1.00	08/31/07 12:00	KYH	EPA 3510C
SW846 8270CSIM	7085875	NQH3608-07	30.60	1.00	08/31/07 09:58	CDJ	EPA 3550B
SW846 8270CSIM	7085854	NQH3608-08	700.00	1.00	08/31/07 12:00	KYH	EPA 3510C
SW846 8270CSIM	7085854	NQH3608-08RE1	700.00	1.00	08/31/07 12:00	KYH	EPA 3510C
Purgeable Petroleum Hydrocarbons							
NWTPH-Gx	7090910	NQH3608-01	5.17	5.00	08/31/07 09:01	NKN	EPA 5035A (GC)
NWTPH-Gx	7090910	NQH3608-03	5.05	5.00	08/31/07 09:05	NKN	EPA 5035A (GC)
NWTPH-Gx	7090910	NQH3608-05	5.01	5.00	08/31/07 09:06	NKN	EPA 5035A (GC)
NWTPH-Gx	7090910	NQH3608-07	5.03	5.00	08/31/07 09:07	NKN	EPA 5035A (GC)
NWTPH-Gx	7090910	NQH3608-07RE1	5.03	5.00	08/31/07 09:07	NKN	EPA 5035A (GC)
Total Metals by EPA Method 6010B							
SW846 6010B	7085913	NQH3608-01	0.50	100.00	08/31/07 08:14	LTB	EPA 3051 / 6010
SW846 6010B	7085913	NQH3608-03	0.52	100.00	08/31/07 08:14	LTB	EPA 3051 / 6010
SW846 6010B	7085913	NQH3608-05	0.50	100.00	08/31/07 08:14	LTB	EPA 3051 / 6010
SW846 6010B	7085913	NQH3608-07	0.50	100.00	08/31/07 08:14	LTB	EPA 3051 / 6010
Volatile Organic Compounds by EPA Method 8260B							
SW846 8260B	7090348	NQH3608-01	5.23	5.00	08/31/07 12:47	NKN	EPA 5035
SW846 8260B	7090348	NQH3608-01	5.23	5.00	08/31/07 12:47	NKN	EPA 5035
SW846 8260B	7090348	NQH3608-03	5.04	5.00	08/31/07 12:47	NKN	EPA 5035
SW846 8260B	7090348	NQH3608-03	5.04	5.00	08/31/07 12:47	NKN	EPA 5035
SW846 8260B	7090348	NQH3608-05	5.09	5.00	08/31/07 12:47	NKN	EPA 5035
SW846 8260B	7090348	NQH3608-05	5.09	5.00	08/31/07 12:47	NKN	EPA 5035
SW846 8260B	7090348	NQH3608-07	5.15	5.00	08/31/07 12:47	NKN	EPA 5035
SW846 8260B	7090348	NQH3608-07	5.15	5.00	08/31/07 12:47	NKN	EPA 5035

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA

Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Total Metals by EPA Method 6010B						
7085913-BLK1						
Lead	<0.857		mg/kg	7085913	7085913-BLK1	09/07/07 05:57
Dissolved Metals by EPA Method 6010B						
7090249-BLK1						
Lead	<0.00300		mg/L	7090249	7090249-BLK1	09/05/07 23:28
Volatile Organic Compounds by EPA Method 8260B						
7090180-BLK1						
Benzene	<0.330		ug/L	7090180	7090180-BLK1	09/10/07 16:21
1,2-Dibromoethane (EDB)	<0.320		ug/L	7090180	7090180-BLK1	09/10/07 16:21
1,2-Dichloroethane	<0.460		ug/L	7090180	7090180-BLK1	09/10/07 16:21
1,1-Dichloroethane	<0.600		ug/L	7090180	7090180-BLK1	09/10/07 16:21
Ethylbenzene	<0.420		ug/L	7090180	7090180-BLK1	09/10/07 16:21
Isopropylbenzene	<0.410		ug/L	7090180	7090180-BLK1	09/10/07 16:21
Methyl tert-Butyl Ether	<0.310		ug/L	7090180	7090180-BLK1	09/10/07 16:21
n-Propylbenzene	<0.350		ug/L	7090180	7090180-BLK1	09/10/07 16:21
Toluene	<0.420		ug/L	7090180	7090180-BLK1	09/10/07 16:21
1,3,5-Trimethylbenzene	<0.240		ug/L	7090180	7090180-BLK1	09/10/07 16:21
1,2,4-Trimethylbenzene	<0.350		ug/L	7090180	7090180-BLK1	09/10/07 16:21
Xylenes, total	<0.450		ug/L	7090180	7090180-BLK1	09/10/07 16:21
Surrogate: 1,2-Dichloroethane-d4	95%			7090180	7090180-BLK1	09/10/07 16:21
Surrogate: Dibromofluoromethane	96%			7090180	7090180-BLK1	09/10/07 16:21
Surrogate: Toluene-d8	105%			7090180	7090180-BLK1	09/10/07 16:21
Surrogate: 4-Bromofluorobenzene	95%			7090180	7090180-BLK1	09/10/07 16:21
7090348-BLK1						
Tertiary Butyl Alcohol	<0.0131		mg/kg	7090348	7090348-BLK1	09/07/07 22:08
Diisopropyl Ether	<0.000460		mg/kg	7090348	7090348-BLK1	09/07/07 22:08
Ethyl tert-Butyl Ether	<0.000660		mg/kg	7090348	7090348-BLK1	09/07/07 22:08
Tert-Amyl Methyl Ether	<0.000570		mg/kg	7090348	7090348-BLK1	09/07/07 22:08
Benzene	<0.000600		mg/kg	7090348	7090348-BLK1	09/07/07 22:08
1,2-Dibromoethane (EDB)	<0.000610		mg/kg	7090348	7090348-BLK1	09/07/07 22:08
1,2-Dichloroethane	<0.000540		mg/kg	7090348	7090348-BLK1	09/07/07 22:08
Ethylbenzene	<0.000630		mg/kg	7090348	7090348-BLK1	09/07/07 22:08
Isopropylbenzene	<0.000550		mg/kg	7090348	7090348-BLK1	09/07/07 22:08
Methyl tert-Butyl Ether	<0.000530		mg/kg	7090348	7090348-BLK1	09/07/07 22:08
n-Propylbenzene	<0.000670		mg/kg	7090348	7090348-BLK1	09/07/07 22:08
Toluene	<0.000660		mg/kg	7090348	7090348-BLK1	09/07/07 22:08
1,3,5-Trimethylbenzene	<0.000510		mg/kg	7090348	7090348-BLK1	09/07/07 22:08
1,2,4-Trimethylbenzene	<0.000590		mg/kg	7090348	7090348-BLK1	09/07/07 22:08
Xylenes, total	<0.00130		mg/kg	7090348	7090348-BLK1	09/07/07 22:08
Surrogate: 1,2-Dichloroethane-d4	99%			7090348	7090348-BLK1	09/07/07 22:08

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B						
7090348-BLK1						
Surrogate: Dibromofluoromethane	103%			7090348	7090348-BLK1	09/07/07 22:08
Surrogate: Toluene-d8	99%			7090348	7090348-BLK1	09/07/07 22:08
Surrogate: 4-Bromofluorobenzene	95%			7090348	7090348-BLK1	09/07/07 22:08
7090635-BLK1						
Tert-Amyl Methyl Ether	<0.450		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Acetone	<7.41		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Ethyl tert-Butyl Ether	<0.440		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Acrylonitrile	<3.93		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Diisopropyl Ether	<0.440		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Benzene	<0.330		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Tertiary Butyl Alcohol	<4.61		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Bromobenzene	<0.450		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Bromochloromethane	<0.700		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Bromodichloromethane	<0.390		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Bromoform	<0.540		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Bromomethane	<0.420		ug/L	7090635	7090635-BLK1	09/05/07 03:14
2-Butanone	<3.06		ug/L	7090635	7090635-BLK1	09/05/07 03:14
tert-Butylbenzene	<0.400		ug/L	7090635	7090635-BLK1	09/05/07 03:14
n-Butylbenzene	<0.780		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Carbon disulfide	<0.230		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Carbon Tetrachloride	<0.410		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Chlorobenzene	<0.340		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Chlorodibromomethane	<0.480		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Butyl acetate	<4.49		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Chloroethane	<0.350		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Chloroform	<0.510		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Chloromethane	<0.310		ug/L	7090635	7090635-BLK1	09/05/07 03:14
2-Chlorotoluene	<0.210		ug/L	7090635	7090635-BLK1	09/05/07 03:14
4-Chlorotoluene	<0.410		ug/L	7090635	7090635-BLK1	09/05/07 03:14
1,2-Dibromo-3-chloropropane	<1.01		ug/L	7090635	7090635-BLK1	09/05/07 03:14
1,2-Dibromoethane (EDB)	<0.320		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Dibromomethane	<0.430		ug/L	7090635	7090635-BLK1	09/05/07 03:14
1,2-Dichlorobenzene	<0.440		ug/L	7090635	7090635-BLK1	09/05/07 03:14
1,3-Dichlorobenzene	<0.410		ug/L	7090635	7090635-BLK1	09/05/07 03:14
1,4-Dichlorobenzene	<0.360		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Dichlorodifluoromethane	<0.290		ug/L	7090635	7090635-BLK1	09/05/07 03:14
1,2-Dichloroethane	<0.460		ug/L	7090635	7090635-BLK1	09/05/07 03:14
1,1-Dichloroethane	<0.600		ug/L	7090635	7090635-BLK1	09/05/07 03:14
1,1-Dichloroethene	<0.270		ug/L	7090635	7090635-BLK1	09/05/07 03:14
trans-1,2-Dichloroethene	<0.200		ug/L	7090635	7090635-BLK1	09/05/07 03:14
cis-1,2-Dichloroethene	<0.540		ug/L	7090635	7090635-BLK1	09/05/07 03:14

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA

Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B						
7090635-BLK1						
1,3-Dichloropropane	<0.480		ug/L	7090635	7090635-BLK1	09/05/07 03:14
2,2-Dichloropropane	<0.370		ug/L	7090635	7090635-BLK1	09/05/07 03:14
1,2-Dichloropropane	<0.370		ug/L	7090635	7090635-BLK1	09/05/07 03:14
trans-1,3-Dichloropropene	<0.310		ug/L	7090635	7090635-BLK1	09/05/07 03:14
1,1-Dichloropropene	<0.280		ug/L	7090635	7090635-BLK1	09/05/07 03:14
cis-1,3-Dichloropropene	<0.330		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Ethylbenzene	<0.420		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Hexachlorobutadiene	<0.660		ug/L	7090635	7090635-BLK1	09/05/07 03:14
2-Hexanone	<2.19		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Isopropylbenzene	<0.410		ug/L	7090635	7090635-BLK1	09/05/07 03:14
p-Isopropyltoluene	<0.320		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Methyl Acetate	<1.44		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Methyl tert-Butyl Ether	<0.310		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Methylene Chloride	<2.10		ug/L	7090635	7090635-BLK1	09/05/07 03:14
4-Methyl-2-pentanone	<4.15		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Naphthalene	<0.650		ug/L	7090635	7090635-BLK1	09/05/07 03:14
n-Propylbenzene	<0.350		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Ethyl Acetate	<3.39		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Styrene	<0.390		ug/L	7090635	7090635-BLK1	09/05/07 03:14
1,1,2,2-Tetrachloroethane	<0.270		ug/L	7090635	7090635-BLK1	09/05/07 03:14
1,1,1,2-Tetrachloroethane	<0.470		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Tetrachloroethene	<0.320		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Toluene	<0.420		ug/L	7090635	7090635-BLK1	09/05/07 03:14
1,2,4-Trichlorobenzene	<0.620		ug/L	7090635	7090635-BLK1	09/05/07 03:14
1,2,3-Trichlorobenzene	<0.620		ug/L	7090635	7090635-BLK1	09/05/07 03:14
1,1,1-Trichloroethane	<0.350		ug/L	7090635	7090635-BLK1	09/05/07 03:14
1,1,2-Trichloroethane	<0.570		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Trichloroethene	<0.510		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Trichlorofluoromethane	<0.400		ug/L	7090635	7090635-BLK1	09/05/07 03:14
1,2,3-Trichloropropane	<0.520		ug/L	7090635	7090635-BLK1	09/05/07 03:14
1,3,5-Trimethylbenzene	<0.240		ug/L	7090635	7090635-BLK1	09/05/07 03:14
1,2,4-Trimethylbenzene	<0.350		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Vinyl chloride	<0.260		ug/L	7090635	7090635-BLK1	09/05/07 03:14
o-Xylene	<0.370		ug/L	7090635	7090635-BLK1	09/05/07 03:14
m,p-Xylene	<0.450		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Xylenes, total	<0.450		ug/L	7090635	7090635-BLK1	09/05/07 03:14
Surrogate: 1,2-Dichloroethane-d4	105%			7090635	7090635-BLK1	09/05/07 03:14
Surrogate: Dibromofluoromethane	102%			7090635	7090635-BLK1	09/05/07 03:14
Surrogate: Toluene-d8	89%			7090635	7090635-BLK1	09/05/07 03:14
Surrogate: 4-Bromofluorobenzene	131%			7090635	7090635-BLK1	09/05/07 03:14

7091613-BLK1

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA

Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B						
7091613-BLK1						
Tert-Amyl Methyl Ether	<0.450		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Acetone	<7.41		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Ethyl tert-Butyl Ether	<0.440		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Acrylonitrile	<3.93		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Diisopropyl Ether	<0.440		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Benzene	0.350		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Tertiary Butyl Alcohol	<4.61		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Bromobenzene	<0.450		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Bromochloromethane	<0.700		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Bromodichloromethane	<0.390		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Bromoform	<0.540		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Bromomethane	<0.420		ug/L	7091613	7091613-BLK1	09/07/07 15:58
2-Butanone	<3.06		ug/L	7091613	7091613-BLK1	09/07/07 15:58
tert-Butylbenzene	<0.400		ug/L	7091613	7091613-BLK1	09/07/07 15:58
n-Butylbenzene	<0.780		ug/L	7091613	7091613-BLK1	09/07/07 15:58
sec-Butylbenzene	<0.260		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Carbon disulfide	<0.230		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Carbon Tetrachloride	<0.410		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Chlorobenzene	<0.340		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Chlorodibromomethane	<0.480		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Chloroethane	<0.350		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Chloroform	<0.510		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Chloromethane	<0.310		ug/L	7091613	7091613-BLK1	09/07/07 15:58
2-Chlorotoluene	<0.210		ug/L	7091613	7091613-BLK1	09/07/07 15:58
4-Chlorotoluene	<0.410		ug/L	7091613	7091613-BLK1	09/07/07 15:58
1,2-Dibromo-3-chloropropane	<1.01		ug/L	7091613	7091613-BLK1	09/07/07 15:58
1,2-Dibromoethane (EDB)	<0.320		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Dibromomethane	<0.430		ug/L	7091613	7091613-BLK1	09/07/07 15:58
1,2-Dichlorobenzene	<0.440		ug/L	7091613	7091613-BLK1	09/07/07 15:58
1,3-Dichlorobenzene	<0.410		ug/L	7091613	7091613-BLK1	09/07/07 15:58
1,4-Dichlorobenzene	<0.360		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Dichlorodifluoromethane	<0.290		ug/L	7091613	7091613-BLK1	09/07/07 15:58
1,2-Dichloroethane	<0.460		ug/L	7091613	7091613-BLK1	09/07/07 15:58
1,1-Dichloroethene	<0.270		ug/L	7091613	7091613-BLK1	09/07/07 15:58
trans-1,2-Dichloroethene	<0.200		ug/L	7091613	7091613-BLK1	09/07/07 15:58
cis-1,2-Dichloroethene	<0.540		ug/L	7091613	7091613-BLK1	09/07/07 15:58
1,3-Dichloropropane	<0.480		ug/L	7091613	7091613-BLK1	09/07/07 15:58
2,2-Dichloropropane	<0.370		ug/L	7091613	7091613-BLK1	09/07/07 15:58
1,2-Dichloropropane	<0.370		ug/L	7091613	7091613-BLK1	09/07/07 15:58
trans-1,3-Dichloropropene	<0.310		ug/L	7091613	7091613-BLK1	09/07/07 15:58
1,1-Dichloropropene	<0.280		ug/L	7091613	7091613-BLK1	09/07/07 15:58
cis-1,3-Dichloropropene	<0.330		ug/L	7091613	7091613-BLK1	09/07/07 15:58

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA

Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B						
7091613-BLK1						
Ethylbenzene	<0.420		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Hexachlorobutadiene	<0.660		ug/L	7091613	7091613-BLK1	09/07/07 15:58
2-Hexanone	<2.19		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Isopropylbenzene	<0.410		ug/L	7091613	7091613-BLK1	09/07/07 15:58
p-Isopropyltoluene	<0.320		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Methyl tert-Butyl Ether	<0.310		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Methylene Chloride	2.19		ug/L	7091613	7091613-BLK1	09/07/07 15:58
4-Methyl-2-pentanone	<4.15		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Naphthalene	<0.650		ug/L	7091613	7091613-BLK1	09/07/07 15:58
n-Propylbenzene	<0.350		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Styrene	<0.390		ug/L	7091613	7091613-BLK1	09/07/07 15:58
1,1,2,2-Tetrachloroethane	<0.270		ug/L	7091613	7091613-BLK1	09/07/07 15:58
1,1,1,2-Tetrachloroethane	<0.470		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Tetrachloroethene	<0.320		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Toluene	<0.420		ug/L	7091613	7091613-BLK1	09/07/07 15:58
1,2,4-Trichlorobenzene	<0.620		ug/L	7091613	7091613-BLK1	09/07/07 15:58
1,2,3-Trichlorobenzene	<0.620		ug/L	7091613	7091613-BLK1	09/07/07 15:58
1,1,1-Trichloroethane	<0.350		ug/L	7091613	7091613-BLK1	09/07/07 15:58
1,1,2-Trichloroethane	<0.570		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Trichloroethene	<0.510		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Trichlorofluoromethane	<0.400		ug/L	7091613	7091613-BLK1	09/07/07 15:58
1,2,3-Trichloropropane	<0.520		ug/L	7091613	7091613-BLK1	09/07/07 15:58
1,3,5-Trimethylbenzene	<0.240		ug/L	7091613	7091613-BLK1	09/07/07 15:58
1,2,4-Trimethylbenzene	<0.350		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Vinyl chloride	<0.260		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Xylenes, total	<0.450		ug/L	7091613	7091613-BLK1	09/07/07 15:58
Surrogate: 1,2-Dichloroethane-d4	113%			7091613	7091613-BLK1	09/07/07 15:58
Surrogate: Dibromofluoromethane	106%			7091613	7091613-BLK1	09/07/07 15:58
Surrogate: Toluene-d8	91%			7091613	7091613-BLK1	09/07/07 15:58
Surrogate: 4-Bromofluorobenzene	101%			7091613	7091613-BLK1	09/07/07 15:58

Polyaromatic Hydrocarbons by EPA 8270C SIM

7085854-BLK1						
Acenaphthene	<0.0420		ug/L	7085854	7085854-BLK1	09/04/07 18:15
Acenaphthylene	<0.0260		ug/L	7085854	7085854-BLK1	09/04/07 18:15
Anthracene	<0.0420		ug/L	7085854	7085854-BLK1	09/04/07 18:15
Benzo (a) anthracene	<0.0340		ug/L	7085854	7085854-BLK1	09/04/07 18:15
Benzo (a) pyrene	<0.0260		ug/L	7085854	7085854-BLK1	09/04/07 18:15
Benzo (b) fluoranthene	<0.0250		ug/L	7085854	7085854-BLK1	09/04/07 18:15
Benzo (g,h,i) perylene	<0.0250		ug/L	7085854	7085854-BLK1	09/04/07 18:15
Benzo (k) fluoranthene	<0.0250		ug/L	7085854	7085854-BLK1	09/04/07 18:15

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA

Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270C SIM						
7085854-BLK1						
Chrysene	<0.0350		ug/L	7085854	7085854-BLK1	09/04/07 18:15
Dibenz (a,h) anthracene	<0.0310		ug/L	7085854	7085854-BLK1	09/04/07 18:15
Fluoranthene	<0.0360		ug/L	7085854	7085854-BLK1	09/04/07 18:15
Fluorene	<0.0360		ug/L	7085854	7085854-BLK1	09/04/07 18:15
Indeno (1,2,3-cd) pyrene	<0.0250		ug/L	7085854	7085854-BLK1	09/04/07 18:15
1-Methylnaphthalene	<0.0430		ug/L	7085854	7085854-BLK1	09/04/07 18:15
2-Methylnaphthalene	<0.0810		ug/L	7085854	7085854-BLK1	09/04/07 18:15
Naphthalene	<0.0390		ug/L	7085854	7085854-BLK1	09/04/07 18:15
Phenanthrene	<0.0610		ug/L	7085854	7085854-BLK1	09/04/07 18:15
Pyrene	<0.0340		ug/L	7085854	7085854-BLK1	09/04/07 18:15
Surrogate: Nitrobenzene-d5	107%			7085854	7085854-BLK1	09/04/07 18:15
Surrogate: 2-Fluorobiphenyl	85%			7085854	7085854-BLK1	09/04/07 18:15
Surrogate: Terphenyl-d14	102%			7085854	7085854-BLK1	09/04/07 18:15
7085875-BLK1						
Acenaphthene	<0.00112		mg/kg	7085875	7085875-BLK1	09/02/07 23:29
Acenaphthylene	<0.00153		mg/kg	7085875	7085875-BLK1	09/02/07 23:29
Anthracene	<0.00287		mg/kg	7085875	7085875-BLK1	09/02/07 23:29
Benzo (a) anthracene	<0.00186		mg/kg	7085875	7085875-BLK1	09/02/07 23:29
Benzo (a) pyrene	<0.00264		mg/kg	7085875	7085875-BLK1	09/02/07 23:29
Benzo (b) fluoranthene	<0.00165		mg/kg	7085875	7085875-BLK1	09/02/07 23:29
Benzo (g,h,i) perylene	<0.00210		mg/kg	7085875	7085875-BLK1	09/02/07 23:29
Benzo (k) fluoranthene	<0.00159		mg/kg	7085875	7085875-BLK1	09/02/07 23:29
Chrysene	<0.00159		mg/kg	7085875	7085875-BLK1	09/02/07 23:29
Dibenz (a,h) anthracene	<0.00275		mg/kg	7085875	7085875-BLK1	09/02/07 23:29
Fluoranthene	<0.00145		mg/kg	7085875	7085875-BLK1	09/02/07 23:29
Fluorene	<0.00132		mg/kg	7085875	7085875-BLK1	09/02/07 23:29
Indeno (1,2,3-cd) pyrene	<0.00287		mg/kg	7085875	7085875-BLK1	09/02/07 23:29
1-Methylnaphthalene	<0.00121		mg/kg	7085875	7085875-BLK1	09/02/07 23:29
2-Methylnaphthalene	<0.00121		mg/kg	7085875	7085875-BLK1	09/02/07 23:29
Naphthalene	<0.00134		mg/kg	7085875	7085875-BLK1	09/02/07 23:29
Phenanthrene	<0.00102		mg/kg	7085875	7085875-BLK1	09/02/07 23:29
Pyrene	<0.00159		mg/kg	7085875	7085875-BLK1	09/02/07 23:29
Surrogate: Nitrobenzene-d5	96%	210		7085875	7085875-BLK1	09/02/07 23:29
Surrogate: 2-Fluorobiphenyl	83%			7085875	7085875-BLK1	09/02/07 23:29
Surrogate: Terphenyl-d14	102%			7085875	7085875-BLK1	09/02/07 23:29

Extractable Petroleum Hydrocarbons

7085915-BLK1

Diesel	<37.0		ug/L	7085915	7085915-BLK1	09/01/07 21:50
Motor Oil	<37.0		ug/L	7085915	7085915-BLK1	09/01/07 21:50
Surrogate: o-Terphenyl	98%			7085915	7085915-BLK1	09/01/07 21:50

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA

Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Extractable Petroleum Hydrocarbons						
7085991-BLK1						
Diesel	<2.00		mg/kg	7085991	7085991-BLK1	09/03/07 12:20
Motor Oil	<2.00		mg/kg	7085991	7085991-BLK1	09/03/07 12:20
Surrogate: o-Terphenyl	91%			7085991	7085991-BLK1	09/03/07 12:20
Purgeable Petroleum Hydrocarbons						
7090564-BLK1						
GRO (C4-C12) NW	68.2		ug/L	7090564	7090564-BLK1	09/05/07 21:59
Surrogate: a,a,a-Trifluorotoluene	86%			7090564	7090564-BLK1	09/05/07 21:59
7090564-BLK2						
GRO (C4-C12) NW	68.1		ug/L	7090564	7090564-BLK2	09/06/07 04:33
Surrogate: a,a,a-Trifluorotoluene	87%			7090564	7090564-BLK2	09/06/07 04:33
7090910-BLK1						
GRO (C4-C12) NW	<0.0180		mg/kg	7090910	7090910-BLK1	09/06/07 03:24
Surrogate: a,a,a-Trifluorotoluene	96%			7090910	7090910-BLK1	09/06/07 03:24
7090910-BLK2						
GRO (C4-C12) NW	<0.0180		mg/kg	7090910	7090910-BLK2	09/06/07 03:45
Surrogate: a,a,a-Trifluorotoluene	93%			7090910	7090910-BLK2	09/06/07 03:45

Client Delta Environmental (Minnesota) / Shell
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Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA

Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Purgeable Petroleum Hydrocarbons									
7090910-DUP1									
GRO (C4-C12) NW	ND	ND		mg/kg		37	7090910	NQH3399-03	09/06/07 09:03
Surrogate: <i>a,a,a</i> -Trifluorotoluene		28.4		ug/L			7090910	NQH3399-03	09/06/07 09:03

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
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Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Total Metals by EPA Method 6010B								
7085913-BS1								
Lead	100	96.6		mg/kg	97%	80 - 120	7085913	09/07/07 06:14
Dissolved Metals by EPA Method 6010B								
7090249-BS1								
Lead	0.0500	0.0449		mg/L	90%	80 - 120	7090249	09/05/07 23:32
Volatile Organic Compounds by EPA Method 8260B								
7090180-BS1								
Benzene	50.0	45.2		ug/L	90%	78 - 125	7090180	09/10/07 14:40
1,2-Dibromoethane (EDB)	50.0	53.2		ug/L	106%	80 - 132	7090180	09/10/07 14:40
1,2-Dichloroethane	50.0	47.3		ug/L	95%	64 - 134	7090180	09/10/07 14:40
1,1-Dichloroethane	50.0	47.2		ug/L	94%	79 - 120	7090180	09/10/07 14:40
Ethylbenzene	50.0	44.4		ug/L	89%	73 - 134	7090180	09/10/07 14:40
Isopropylbenzene	50.0	41.0		ug/L	82%	74 - 121	7090180	09/10/07 14:40
Methyl tert-Butyl Ether	50.0	48.5		ug/L	97%	69 - 122	7090180	09/10/07 14:40
n-Propylbenzene	50.0	50.8		ug/L	102%	76 - 133	7090180	09/10/07 14:40
Toluene	50.0	51.3		ug/L	103%	78 - 122	7090180	09/10/07 14:40
1,3,5-Trimethylbenzene	50.0	49.3		ug/L	99%	72 - 136	7090180	09/10/07 14:40
1,2,4-Trimethylbenzene	50.0	49.1		ug/L	98%	73 - 134	7090180	09/10/07 14:40
Xylenes, total	150	127		ug/L	85%	79 - 130	7090180	09/10/07 14:40
Surrogate: 1,2-Dichloroethane-d4	25.0	23.8			95%	62 - 142	7090180	09/10/07 14:40
Surrogate: Dibromofluoromethane	25.0	23.8			95%	78 - 123	7090180	09/10/07 14:40
Surrogate: Toluene-d8	25.0	26.1			104%	79 - 120	7090180	09/10/07 14:40
Surrogate: 4-Bromofluorobenzene	25.0	24.5			98%	75 - 133	7090180	09/10/07 14:40
7090348-BS1								
Tertiary Butyl Alcohol	500	445		ug/kg	89%	22 - 159	7090348	09/07/07 21:06
Diisopropyl Ether	50.0	49.3		ug/kg	99%	70 - 122	7090348	09/07/07 21:06
Ethyl tert-Butyl Ether	50.0	50.7		ug/kg	101%	66 - 126	7090348	09/07/07 21:06
Tert-Amyl Methyl Ether	50.0	50.4		ug/kg	101%	67 - 130	7090348	09/07/07 21:06
Benzene	50.0	54.6		ug/kg	109%	78 - 123	7090348	09/07/07 21:06
1,2-Dibromoethane (EDB)	50.0	55.1		ug/kg	110%	79 - 129	7090348	09/07/07 21:06
1,2-Dichloroethane	50.0	54.7		ug/kg	109%	73 - 131	7090348	09/07/07 21:06
Ethylbenzene	50.0	54.3		ug/kg	109%	78 - 127	7090348	09/07/07 21:06
Isopropylbenzene	50.0	53.4		ug/kg	107%	73 - 123	7090348	09/07/07 21:06
Methyl tert-Butyl Ether	50.0	49.9		ug/kg	100%	62 - 129	7090348	09/07/07 21:06
n-Propylbenzene	50.0	50.5		ug/kg	101%	71 - 135	7090348	09/07/07 21:06
Toluene	50.0	54.4		ug/kg	109%	77 - 124	7090348	09/07/07 21:06
1,3,5-Trimethylbenzene	50.0	53.9		ug/kg	108%	74 - 133	7090348	09/07/07 21:06
1,2,4-Trimethylbenzene	50.0	51.0		ug/kg	102%	72 - 132	7090348	09/07/07 21:06
Xylenes, total	150	161		ug/kg	108%	77 - 128	7090348	09/07/07 21:06
Surrogate: 1,2-Dichloroethane-d4	50.0	48.9			98%	54 - 145	7090348	09/07/07 21:06

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B								
7090348-BS1								
Surrogate: Dibromofluoromethane	50.0	52.1			104%	67 - 129	7090348	09/07/07 21:06
Surrogate: Toluene-d8	50.0	49.8			100%	66 - 142	7090348	09/07/07 21:06
Surrogate: 4-Bromofluorobenzene	50.0	48.6			97%	68 - 150	7090348	09/07/07 21:06
7090635-BS1								
Tert-Amyl Methyl Ether	50.0	47.0		ug/L	94%	63 - 133	7090635	09/05/07 00:46
Acetone	250	253		ug/L	101%	63 - 147	7090635	09/05/07 00:46
Ethyl tert-Butyl Ether	50.0	46.2		ug/L	92%	65 - 126	7090635	09/05/07 00:46
Acrylonitrile	250	245		ug/L	98%	76 - 125	7090635	09/05/07 00:46
Diisopropyl Ether	50.0	46.8		ug/L	94%	74 - 120	7090635	09/05/07 00:46
Benzene	50.0	51.5		ug/L	103%	78 - 125	7090635	09/05/07 00:46
Tertiary Butyl Alcohol	500	730		ug/L	146%	33 - 181	7090635	09/05/07 00:46
Bromobenzene	50.0	49.7		ug/L	99%	71 - 142	7090635	09/05/07 00:46
Bromochloromethane	50.0	45.6		ug/L	91%	76 - 129	7090635	09/05/07 00:46
Bromodichloromethane	50.0	55.7		ug/L	111%	71 - 134	7090635	09/05/07 00:46
Bromoform	50.0	51.2		ug/L	102%	49 - 129	7090635	09/05/07 00:46
Bromomethane	50.0	50.7		ug/L	101%	42 - 154	7090635	09/05/07 00:46
2-Butanone	250	230		ug/L	92%	74 - 130	7090635	09/05/07 00:46
tert-Butylbenzene	50.0	59.2		ug/L	118%	79 - 128	7090635	09/05/07 00:46
n-Butylbenzene	50.0	53.6		ug/L	107%	68 - 138	7090635	09/05/07 00:46
Carbon disulfide	50.0	55.2		ug/L	110%	65 - 122	7090635	09/05/07 00:46
Carbon Tetrachloride	50.0	63.6		ug/L	127%	62 - 142	7090635	09/05/07 00:46
Chlorobenzene	50.0	54.0		ug/L	108%	82 - 125	7090635	09/05/07 00:46
Chlorodibromomethane	50.0	52.0		ug/L	104%	67 - 135	7090635	09/05/07 00:46
Chloroethane	50.0	46.5		ug/L	93%	57 - 138	7090635	09/05/07 00:46
Chloroform	50.0	53.6		ug/L	107%	75 - 122	7090635	09/05/07 00:46
Chloromethane	50.0	30.1		ug/L	60%	31 - 147	7090635	09/05/07 00:46
2-Chlorotoluene	50.0	54.0		ug/L	108%	74 - 135	7090635	09/05/07 00:46
4-Chlorotoluene	50.0	57.3		ug/L	115%	74 - 133	7090635	09/05/07 00:46
1,2-Dibromo-3-chloropropane	50.0	36.7		ug/L	73%	45 - 140	7090635	09/05/07 00:46
1,2-Dibromoethane (EDB)	50.0	56.2		ug/L	112%	80 - 132	7090635	09/05/07 00:46
Dibromomethane	50.0	51.0		ug/L	102%	69 - 132	7090635	09/05/07 00:46
1,2-Dichlorobenzene	50.0	56.4		ug/L	113%	82 - 133	7090635	09/05/07 00:46
1,3-Dichlorobenzene	50.0	58.2		ug/L	116%	77 - 132	7090635	09/05/07 00:46
1,4-Dichlorobenzene	50.0	56.8		ug/L	114%	79 - 125	7090635	09/05/07 00:46
Dichlorodifluoromethane	50.0	22.8		ug/L	46%	34 - 120	7090635	09/05/07 00:46
1,2-Dichloroethane	50.0	56.3		ug/L	113%	64 - 134	7090635	09/05/07 00:46
1,1-Dichloroethane	50.0	58.4		ug/L	117%	79 - 120	7090635	09/05/07 00:46
1,1-Dichloroethene	50.0	57.7		ug/L	115%	71 - 123	7090635	09/05/07 00:46
trans-1,2-Dichloroethene	50.0	61.1		ug/L	122%	74 - 127	7090635	09/05/07 00:46
cis-1,2-Dichloroethene	50.0	52.0		ug/L	104%	71 - 126	7090635	09/05/07 00:46
1,3-Dichloropropane	50.0	55.7		ug/L	111%	80 - 128	7090635	09/05/07 00:46

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B								
7090635-BS1								
2,2-Dichloropropane	50.0	50.1		ug/L	100%	25 - 156	7090635	09/05/07 00:46
1,2-Dichloropropane	50.0	50.0		ug/L	100%	73 - 120	7090635	09/05/07 00:46
trans-1,3-Dichloropropene	50.0	52.3		ug/L	105%	61 - 124	7090635	09/05/07 00:46
1,1-Dichloropropene	50.0	58.3		ug/L	117%	79 - 138	7090635	09/05/07 00:46
cis-1,3-Dichloropropene	50.0	59.3		ug/L	119%	70 - 135	7090635	09/05/07 00:46
Ethylbenzene	50.0	55.3		ug/L	111%	73 - 134	7090635	09/05/07 00:46
Hexachlorobutadiene	50.0	64.5		ug/L	129%	58 - 145	7090635	09/05/07 00:46
2-Hexanone	250	233		ug/L	93%	72 - 136	7090635	09/05/07 00:46
Isopropylbenzene	50.0	58.4		ug/L	117%	74 - 121	7090635	09/05/07 00:46
p-Isopropyltoluene	50.0	52.3		ug/L	105%	70 - 133	7090635	09/05/07 00:46
Methyl Acetate	50.0	37.4		ug/L	75%	58 - 185	7090635	09/05/07 00:46
Methyl tert-Butyl Ether	50.0	52.4		ug/L	105%	69 - 122	7090635	09/05/07 00:46
Methylene Chloride	50.0	53.4		ug/L	107%	75 - 127	7090635	09/05/07 00:46
4-Methyl-2-pentanone	250	241		ug/L	96%	77 - 132	7090635	09/05/07 00:46
Naphthalene	50.0	34.8		ug/L	70%	65 - 145	7090635	09/05/07 00:46
n-Propylbenzene	50.0	56.3		ug/L	113%	76 - 133	7090635	09/05/07 00:46
Styrene	50.0	68.6		ug/L	137%	80 - 145	7090635	09/05/07 00:46
1,1,2,2-Tetrachloroethane	50.0	46.7		ug/L	93%	71 - 137	7090635	09/05/07 00:46
1,1,1,2-Tetrachloroethane	50.0	61.8		ug/L	124%	72 - 136	7090635	09/05/07 00:46
Tetrachloroethene	50.0	58.4		ug/L	117%	70 - 131	7090635	09/05/07 00:46
Toluene	50.0	55.2		ug/L	110%	78 - 122	7090635	09/05/07 00:46
1,2,4-Trichlorobenzene	50.0	45.6		ug/L	91%	63 - 140	7090635	09/05/07 00:46
1,2,3-Trichlorobenzene	50.0	44.9		ug/L	90%	60 - 144	7090635	09/05/07 00:46
1,1,1-Trichloroethane	50.0	57.4		ug/L	115%	69 - 128	7090635	09/05/07 00:46
1,1,2-Trichloroethane	50.0	56.0		ug/L	112%	81 - 127	7090635	09/05/07 00:46
Trichloroethene	50.0	55.9		ug/L	112%	73 - 133	7090635	09/05/07 00:46
Trichlorofluoromethane	50.0	50.4		ug/L	101%	49 - 139	7090635	09/05/07 00:46
1,2,3-Trichloropropane	50.0	45.5		ug/L	91%	52 - 151	7090635	09/05/07 00:46
1,3,5-Trimethylbenzene	50.0	57.7		ug/L	115%	72 - 136	7090635	09/05/07 00:46
1,2,4-Trimethylbenzene	50.0	57.0		ug/L	114%	73 - 134	7090635	09/05/07 00:46
Vinyl chloride	50.0	43.8		ug/L	88%	54 - 137	7090635	09/05/07 00:46
o-Xylene	50.0	59.1		ug/L	118%	79 - 130	7090635	09/05/07 00:46
m,p-Xylene	100	115		ug/L	115%	79 - 131	7090635	09/05/07 00:46
Xylenes, total	150	174		ug/L	116%	79 - 130	7090635	09/05/07 00:46
Surrogate: Dibromofluoromethane	25.0	23.4			94%	78 - 123	7090635	09/05/07 00:46
Surrogate: Toluene-d8	25.0	25.0			100%	79 - 120	7090635	09/05/07 00:46
7090635-BS2								
Butyl acetate	500	410		ug/L	82%	12 - 172	7090635	09/05/07 01:36
Ethyl Acetate	500	526		ug/L	105%	12 - 172	7090635	09/05/07 01:36
Surrogate: 1,2-Dichloroethane-d4	25.0	26.4			105%	62 - 142	7090635	09/05/07 01:36
Surrogate: Dibromofluoromethane	25.0	26.0			104%	78 - 123	7090635	09/05/07 01:36

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B								
7090635-BS2								
Surrogate: Toluene-d8	25.0	18.6	Z10		75%	79 - 120	7090635	09/05/07 01:36
Surrogate: 4-Bromofluorobenzene	25.0	23.6			95%	75 - 133	7090635	09/05/07 01:36
7091613-BS1								
Tert-Amyl Methyl Ether	50.0	52.7		ug/L	105%	63 - 133	7091613	09/07/07 14:13
Acetone	250	253		ug/L	101%	63 - 147	7091613	09/07/07 14:13
Ethyl tert-Butyl Ether	50.0	52.6		ug/L	105%	65 - 126	7091613	09/07/07 14:13
Acrylonitrile	250	258		ug/L	103%	76 - 125	7091613	09/07/07 14:13
Diisopropyl Ether	50.0	49.7		ug/L	99%	74 - 120	7091613	09/07/07 14:13
Benzene	50.0	51.1		ug/L	102%	78 - 125	7091613	09/07/07 14:13
Tertiary Butyl Alcohol	500	538		ug/L	108%	33 - 181	7091613	09/07/07 14:13
Bromobenzene	50.0	47.2		ug/L	94%	71 - 142	7091613	09/07/07 14:13
Bromochloromethane	50.0	49.2		ug/L	98%	76 - 129	7091613	09/07/07 14:13
Bromodichloromethane	50.0	59.4		ug/L	119%	71 - 134	7091613	09/07/07 14:13
Bromoform	50.0	56.7		ug/L	113%	49 - 129	7091613	09/07/07 14:13
Bromomethane	50.0	44.8		ug/L	90%	42 - 154	7091613	09/07/07 14:13
2-Butanone	250	262		ug/L	105%	74 - 130	7091613	09/07/07 14:13
tert-Butylbenzene	50.0	52.0		ug/L	104%	79 - 128	7091613	09/07/07 14:13
n-Butylbenzene	50.0	49.1		ug/L	98%	68 - 138	7091613	09/07/07 14:13
sec-Butylbenzene	50.0	54.1		ug/L	108%	78 - 129	7091613	09/07/07 14:13
Carbon disulfide	50.0	52.9		ug/L	106%	65 - 122	7091613	09/07/07 14:13
Carbon Tetrachloride	50.0	58.0		ug/L	116%	62 - 142	7091613	09/07/07 14:13
Chlorobenzene	50.0	51.8		ug/L	104%	82 - 125	7091613	09/07/07 14:13
Chlorodibromomethane	50.0	50.2		ug/L	100%	67 - 135	7091613	09/07/07 14:13
Chloroethane	50.0	44.0		ug/L	88%	57 - 138	7091613	09/07/07 14:13
Chloroform	50.0	51.5		ug/L	103%	75 - 122	7091613	09/07/07 14:13
Chloromethane	50.0	34.6		ug/L	69%	31 - 147	7091613	09/07/07 14:13
2-Chlorotoluene	50.0	46.2		ug/L	92%	74 - 135	7091613	09/07/07 14:13
4-Chlorotoluene	50.0	46.2		ug/L	92%	74 - 133	7091613	09/07/07 14:13
1,2-Dibromo-3-chloropropane	50.0	51.5		ug/L	103%	45 - 140	7091613	09/07/07 14:13
1,2-Dibromoethane (EDB)	50.0	49.9		ug/L	100%	80 - 132	7091613	09/07/07 14:13
Dibromomethane	50.0	53.5		ug/L	107%	69 - 132	7091613	09/07/07 14:13
1,2-Dichlorobenzene	50.0	46.6		ug/L	93%	82 - 133	7091613	09/07/07 14:13
1,3-Dichlorobenzene	50.0	47.4		ug/L	95%	77 - 132	7091613	09/07/07 14:13
1,4-Dichlorobenzene	50.0	48.9		ug/L	98%	79 - 125	7091613	09/07/07 14:13
Dichlorodifluoromethane	50.0	32.4		ug/L	65%	34 - 120	7091613	09/07/07 14:13
1,2-Dichloroethane	50.0	57.5		ug/L	115%	64 - 134	7091613	09/07/07 14:13
1,1-Dichloroethene	50.0	55.4		ug/L	111%	71 - 123	7091613	09/07/07 14:13
trans-1,2-Dichloroethene	50.0	54.1		ug/L	108%	74 - 127	7091613	09/07/07 14:13
cis-1,2-Dichloroethene	50.0	52.7		ug/L	105%	71 - 126	7091613	09/07/07 14:13
1,3-Dichloropropane	50.0	50.4		ug/L	101%	80 - 128	7091613	09/07/07 14:13
2,2-Dichloropropane	50.0	57.3		ug/L	115%	25 - 156	7091613	09/07/07 14:13

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA

LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B								
7091613-BS1								
1,2-Dichloropropane	50.0	44.9		ug/L	90%	73 - 120	7091613	09/07/07 14:13
trans-1,3-Dichloropropene	50.0	56.1		ug/L	112%	61 - 124	7091613	09/07/07 14:13
1,1-Dichloropropene	50.0	51.8		ug/L	104%	79 - 138	7091613	09/07/07 14:13
cis-1,3-Dichloropropene	50.0	52.3		ug/L	105%	70 - 135	7091613	09/07/07 14:13
Ethylbenzene	50.0	51.8		ug/L	104%	73 - 134	7091613	09/07/07 14:13
Hexachlorobutadiene	50.0	55.8		ug/L	112%	58 - 145	7091613	09/07/07 14:13
2-Hexanone	250	225		ug/L	90%	72 - 136	7091613	09/07/07 14:13
Isopropylbenzene	50.0	49.9		ug/L	100%	74 - 121	7091613	09/07/07 14:13
p-Isopropyltoluene	50.0	53.2		ug/L	106%	70 - 133	7091613	09/07/07 14:13
Methyl tert-Butyl Ether	50.0	50.3		ug/L	101%	69 - 122	7091613	09/07/07 14:13
Methylene Chloride	50.0	56.4		ug/L	113%	75 - 127	7091613	09/07/07 14:13
4-Methyl-2-pentanone	250	233		ug/L	93%	77 - 132	7091613	09/07/07 14:13
Naphthalene	50.0	55.5		ug/L	111%	65 - 145	7091613	09/07/07 14:13
n-Propylbenzene	50.0	47.5		ug/L	95%	76 - 133	7091613	09/07/07 14:13
Styrene	50.0	55.8		ug/L	112%	80 - 145	7091613	09/07/07 14:13
1,1,2,2-Tetrachloroethane	50.0	46.5		ug/L	93%	71 - 137	7091613	09/07/07 14:13
1,1,1,2-Tetrachloroethane	50.0	60.6		ug/L	121%	72 - 136	7091613	09/07/07 14:13
Tetrachloroethene	50.0	50.4		ug/L	101%	70 - 131	7091613	09/07/07 14:13
Toluene	50.0	50.1		ug/L	100%	78 - 122	7091613	09/07/07 14:13
1,2,4-Trichlorobenzene	50.0	47.6		ug/L	95%	63 - 140	7091613	09/07/07 14:13
1,2,3-Trichlorobenzene	50.0	52.1		ug/L	104%	60 - 144	7091613	09/07/07 14:13
1,1,1-Trichloroethane	50.0	58.0		ug/L	116%	69 - 128	7091613	09/07/07 14:13
1,1,2-Trichloroethane	50.0	52.0		ug/L	104%	81 - 127	7091613	09/07/07 14:13
Trichloroethene	50.0	52.4		ug/L	105%	73 - 133	7091613	09/07/07 14:13
Trichlorofluoromethane	50.0	57.7		ug/L	115%	49 - 139	7091613	09/07/07 14:13
1,2,3-Trichloropropane	50.0	45.1		ug/L	90%	52 - 151	7091613	09/07/07 14:13
1,3,5-Trimethylbenzene	50.0	48.3		ug/L	97%	72 - 136	7091613	09/07/07 14:13
1,2,4-Trimethylbenzene	50.0	50.5		ug/L	101%	73 - 134	7091613	09/07/07 14:13
Vinyl chloride	50.0	40.8		ug/L	82%	54 - 137	7091613	09/07/07 14:13
Xylenes, total	150	157		ug/L	105%	79 - 130	7091613	09/07/07 14:13
Surrogate: 1,2-Dichloroethane-d4	25.0	24.5			98%	62 - 142	7091613	09/07/07 14:13
Surrogate: Dibromofluoromethane	25.0	23.5			94%	78 - 123	7091613	09/07/07 14:13
Surrogate: Toluene-d8	25.0	22.8			91%	79 - 120	7091613	09/07/07 14:13
Surrogate: 4-Bromofluorobenzene	25.0	22.1			88%	75 - 133	7091613	09/07/07 14:13

Polyaromatic Hydrocarbons by EPA 8270C SIM

7085854-BS1

Acenaphthene	1.00	0.890	MNR1	ug/L	89%	48 - 133	7085854	09/04/07 18:36
Acenaphthylene	1.00	0.960	MNR1	ug/L	96%	49 - 139	7085854	09/04/07 18:36
Anthracene	1.00	0.940	MNR1	ug/L	94%	55 - 146	7085854	09/04/07 18:36
Benzo (a) anthracene	1.00	0.990	MNR1	ug/L	99%	54 - 143	7085854	09/04/07 18:36

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270C SIM								
7085854-BS1								
Benzo (a) pyrene	1.00	0.860	MNR1	ug/L	86%	47 - 140	7085854	09/04/07 18:36
Benzo (b) fluoranthene	1.00	1.18	MNR1	ug/L	118%	56 - 142	7085854	09/04/07 18:36
Benzo (g,h,i) perylene	1.00	1.15	MNR1	ug/L	115%	39 - 142	7085854	09/04/07 18:36
Benzo (k) fluoranthene	1.00	0.750	MNR1	ug/L	75%	54 - 147	7085854	09/04/07 18:36
Chrysene	1.00	0.870	MNR1	ug/L	87%	60 - 145	7085854	09/04/07 18:36
Dibenz (a,h) anthracene	1.00	1.14	MNR1	ug/L	114%	35 - 146	7085854	09/04/07 18:36
Fluoranthene	1.00	0.970	MNR1	ug/L	97%	56 - 135	7085854	09/04/07 18:36
Fluorene	1.00	0.960	MNR1	ug/L	96%	52 - 141	7085854	09/04/07 18:36
Indeno (1,2,3-cd) pyrene	1.00	1.03	MNR1	ug/L	103%	41 - 139	7085854	09/04/07 18:36
1-Methylnaphthalene	1.01	0.870	MNR1	ug/L	86%	42 - 130	7085854	09/04/07 18:36
2-Methylnaphthalene	1.00	0.910	MNR1	ug/L	91%	46 - 136	7085854	09/04/07 18:36
Naphthalene	1.00	0.860	MNR1	ug/L	86%	47 - 129	7085854	09/04/07 18:36
Phenanthrene	1.00	0.850	MNR1	ug/L	85%	50 - 133	7085854	09/04/07 18:36
Pyrene	1.00	1.02	MNR1	ug/L	102%	56 - 140	7085854	09/04/07 18:36
Surrogate: Nitrobenzene-d5	1.00	1.12			112%	24 - 125	7085854	09/04/07 18:36
Surrogate: 2-Fluorobiphenyl	1.00	0.900			90%	30 - 120	7085854	09/04/07 18:36
Surrogate: Terphenyl-d14	1.00	1.05			105%	29 - 149	7085854	09/04/07 18:36
7085875-BS1								
Acenaphthene	0.0333	0.0313		mg/kg	94%	42 - 114	7085875	09/01/07 18:07
Acenaphthylene	0.0333	0.0340		mg/kg	102%	51 - 118	7085875	09/01/07 18:07
Anthracene	0.0333	0.0340		mg/kg	102%	49 - 139	7085875	09/01/07 18:07
Benzo (a) anthracene	0.0333	0.0370		mg/kg	111%	56 - 122	7085875	09/01/07 18:07
Benzo (a) pyrene	0.0333	0.0313		mg/kg	94%	56 - 113	7085875	09/01/07 18:07
Benzo (b) fluoranthene	0.0333	0.0270		mg/kg	81%	60 - 123	7085875	09/01/07 18:07
Benzo (g,h,i) perylene	0.0333	0.0377		mg/kg	113%	48 - 126	7085875	09/01/07 18:07
Benzo (k) fluoranthene	0.0333	0.0290		mg/kg	87%	61 - 124	7085875	09/01/07 18:07
Chrysene	0.0333	0.0327		mg/kg	98%	60 - 127	7085875	09/01/07 18:07
Dibenz (a,h) anthracene	0.0333	0.0380		mg/kg	114%	54 - 119	7085875	09/01/07 18:07
Fluoranthene	0.0333	0.0387		mg/kg	116%	51 - 118	7085875	09/01/07 18:07
Fluorene	0.0333	0.0340		mg/kg	102%	46 - 118	7085875	09/01/07 18:07
Indeno (1,2,3-cd) pyrene	0.0333	0.0333		mg/kg	100%	40 - 125	7085875	09/01/07 18:07
1-Methylnaphthalene	0.0337	0.0300		mg/kg	89%	49 - 110	7085875	09/01/07 18:07
2-Methylnaphthalene	0.0333	0.0323		mg/kg	97%	55 - 114	7085875	09/01/07 18:07
Naphthalene	0.0333	0.0297		mg/kg	89%	36 - 106	7085875	09/01/07 18:07
Phenanthrene	0.0333	0.0320		mg/kg	96%	47 - 118	7085875	09/01/07 18:07
Pyrene	0.0333	0.0370		mg/kg	111%	48 - 124	7085875	09/01/07 18:07
Surrogate: Nitrobenzene-d5	0.0333	0.0327	Z10		98%	34 - 87	7085875	09/01/07 18:07
Surrogate: 2-Fluorobiphenyl	0.0333	0.0307			92%	30 - 93	7085875	09/01/07 18:07
Surrogate: Terphenyl-d14	0.0333	0.0333			100%	49 - 123	7085875	09/01/07 18:07

Extractable Petroleum Hydrocarbons

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Extractable Petroleum Hydrocarbons								
7085915-BS1								
Diesel	1000	747		ug/L	75%	35 - 122	7085915	09/01/07 22:07
Surrogate: o-Terphenyl	20.0	18.1			91%	50 - 150	7085915	09/01/07 22:07
7085991-BS1								
Diesel	40.0	33.2		mg/kg	83%	59 - 135	7085991	09/01/07 23:03
Surrogate: o-Terphenyl	0.800	0.841			105%	50 - 150	7085991	09/01/07 23:03
Purgeable Petroleum Hydrocarbons								
7090564-BS1								
GRO (C4-C12) NW	1000	846		ug/L	85%	66 - 125	7090564	09/06/07 03:08
Surrogate: a,a,a-Trifluorotoluene	30.0	36.2			121%	46 - 153	7090564	09/06/07 03:08
7090564-BS2								
GRO (C4-C12) NW	1000	842		ug/L	84%	66 - 125	7090564	09/06/07 08:47
Surrogate: a,a,a-Trifluorotoluene	30.0	37.4			125%	46 - 153	7090564	09/06/07 08:47
7090910-BS2								
GRO (C4-C12) NW	10.0	9.20		mg/kg	92%	72 - 126	7090910	09/06/07 19:21
Surrogate: a,a,a-Trifluorotoluene	30.0	33.7			112%	52 - 145	7090910	09/06/07 19:21

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA

LCS Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Total Metals by EPA Method 6010B												
7085913-BSD1												
Lead		97.2		mg/kg	100	97%	80 - 120	0.7	20	7085913		09/07/07 06:18
Volatile Organic Compounds by EPA Method 8260B												
7090180-BSD1												
Benzene		45.8		ug/L	50.0	92%	78 - 125	1	15	7090180		09/10/07 15:05
1,2-Dibromoethane (EDB)		54.0		ug/L	50.0	108%	80 - 132	1	16	7090180		09/10/07 15:05
1,2-Dichloroethane		48.3		ug/L	50.0	97%	64 - 134	2	19	7090180		09/10/07 15:05
1,1-Dichloroethane		47.8		ug/L	50.0	96%	79 - 120	1	17	7090180		09/10/07 15:05
Ethylbenzene		44.8		ug/L	50.0	90%	73 - 134	1	15	7090180		09/10/07 15:05
Isopropylbenzene		40.6		ug/L	50.0	81%	74 - 121	1	17	7090180		09/10/07 15:05
Methyl tert-Butyl Ether		49.5		ug/L	50.0	99%	69 - 122	2	16	7090180		09/10/07 15:05
n-Propylbenzene		50.4		ug/L	50.0	101%	76 - 133	1	18	7090180		09/10/07 15:05
Toluene		52.0		ug/L	50.0	104%	78 - 122	1	15	7090180		09/10/07 15:05
1,3,5-Trimethylbenzene		48.8		ug/L	50.0	98%	72 - 136	0.9	20	7090180		09/10/07 15:05
1,2,4-Trimethylbenzene		49.2		ug/L	50.0	98%	73 - 134	0.1	18	7090180		09/10/07 15:05
Xylenes, total		128		ug/L	150	86%	79 - 130	1	16	7090180		09/10/07 15:05
Surrogate: 1,2-Dichloroethane-d4		24.0		ug/L	25.0	96%	62 - 142			7090180		09/10/07 15:05
Surrogate: Dibromofluoromethane		24.1		ug/L	25.0	96%	78 - 123			7090180		09/10/07 15:05
Surrogate: Toluene-d8		26.3		ug/L	25.0	105%	79 - 120			7090180		09/10/07 15:05
Surrogate: 4-Bromofluorobenzene		23.6		ug/L	25.0	94%	75 - 133			7090180		09/10/07 15:05
7090348-BSD1												
Tertiary Butyl Alcohol		453		ug/kg	500	91%	22 - 159	2	47	7090348		09/07/07 21:37
Diisopropyl Ether		45.0		ug/kg	50.0	90%	70 - 122	9	40	7090348		09/07/07 21:37
Ethyl tert-Butyl Ether		46.6		ug/kg	50.0	93%	66 - 126	8	50	7090348		09/07/07 21:37
Tert-Amyl Methyl Ether		47.3		ug/kg	50.0	95%	67 - 130	6	43	7090348		09/07/07 21:37
Benzene		50.0		ug/kg	50.0	100%	78 - 123	9	42	7090348		09/07/07 21:37
1,2-Dibromoethane (EDB)		50.6		ug/kg	50.0	101%	79 - 129	9	50	7090348		09/07/07 21:37
1,2-Dichloroethane		50.8		ug/kg	50.0	102%	73 - 131	7	42	7090348		09/07/07 21:37
Ethylbenzene		49.0		ug/kg	50.0	98%	78 - 127	10	42	7090348		09/07/07 21:37
Isopropylbenzene		48.8		ug/kg	50.0	98%	73 - 123	9	44	7090348		09/07/07 21:37
Methyl tert-Butyl Ether		46.8		ug/kg	50.0	94%	62 - 129	6	47	7090348		09/07/07 21:37
n-Propylbenzene		45.6		ug/kg	50.0	91%	71 - 135	10	50	7090348		09/07/07 21:37
Toluene		49.6		ug/kg	50.0	99%	77 - 124	9	50	7090348		09/07/07 21:37
1,3,5-Trimethylbenzene		48.8		ug/kg	50.0	98%	74 - 133	10	50	7090348		09/07/07 21:37
1,2,4-Trimethylbenzene		46.5		ug/kg	50.0	93%	72 - 132	9	50	7090348		09/07/07 21:37
Xylenes, total		147		ug/kg	150	98%	77 - 128	10	50	7090348		09/07/07 21:37
Surrogate: 1,2-Dichloroethane-d4		49.6		ug/kg	50.0	99%	54 - 145			7090348		09/07/07 21:37
Surrogate: Dibromofluoromethane		52.7		ug/kg	50.0	105%	67 - 129			7090348		09/07/07 21:37
Surrogate: Toluene-d8		49.1		ug/kg	50.0	98%	66 - 142			7090348		09/07/07 21:37
Surrogate: 4-Bromofluorobenzene		48.4		ug/kg	50.0	97%	68 - 150			7090348		09/07/07 21:37

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA
LCS Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B												
7090635-BSD1												
Tert-Amyl Methyl Ether		46.4	MNR1	ug/L	50.0	93%	63 - 133	1	16	7090635		09/05/07 01:11
Acetone		291	MNR1	ug/L	250	116%	63 - 147	14	22	7090635		09/05/07 01:11
Ethyl tert-Butyl Ether		45.5	MNR1	ug/L	50.0	91%	65 - 126	1	16	7090635		09/05/07 01:11
Acrylonitrile		248	MNR1	ug/L	250	99%	76 - 125	1	15	7090635		09/05/07 01:11
Diisopropyl Ether		47.9	MNR1	ug/L	50.0	96%	74 - 120	2	17	7090635		09/05/07 01:11
Benzene		50.3	MNR1	ug/L	50.0	101%	78 - 125	2	15	7090635		09/05/07 01:11
Tertiary Butyl Alcohol		751	MNR1	ug/L	500	150%	33 - 181	3	20	7090635		09/05/07 01:11
Bromobenzene		49.7	MNR1	ug/L	50.0	99%	71 - 142	0.1	17	7090635		09/05/07 01:11
Bromochloromethane		44.6	MNR1	ug/L	50.0	89%	76 - 129	2	15	7090635		09/05/07 01:11
Bromodichloromethane		55.0	MNR1	ug/L	50.0	110%	71 - 134	1	17	7090635		09/05/07 01:11
Bromoform		51.3	MNR1	ug/L	50.0	103%	49 - 129	0.1	19	7090635		09/05/07 01:11
Bromomethane		55.8	MNR1	ug/L	50.0	112%	42 - 154	10	41	7090635		09/05/07 01:11
2-Butanone		238	MNR1	ug/L	250	95%	74 - 130	4	17	7090635		09/05/07 01:11
tert-Butylbenzene		59.8	MNR1	ug/L	50.0	120%	79 - 128	1	20	7090635		09/05/07 01:11
n-Butylbenzene		54.8	MNR1	ug/L	50.0	110%	68 - 138	2	23	7090635		09/05/07 01:11
Carbon disulfide		57.0	MNR1	ug/L	50.0	114%	65 - 122	3	50	7090635		09/05/07 01:11
Carbon Tetrachloride		63.5	MNR1	ug/L	50.0	127%	62 - 142	0.2	18	7090635		09/05/07 01:11
Chlorobenzene		52.9	MNR1	ug/L	50.0	106%	82 - 125	2	15	7090635		09/05/07 01:11
Chlorodibromomethane		51.3	MNR1	ug/L	50.0	103%	67 - 135	1	18	7090635		09/05/07 01:11
Chloroethane		47.0	MNR1	ug/L	50.0	94%	57 - 138	1	36	7090635		09/05/07 01:11
Chloroform		52.8	MNR1	ug/L	50.0	106%	75 - 122	2	16	7090635		09/05/07 01:11
Chloromethane		31.5	MNR1	ug/L	50.0	63%	31 - 147	5	46	7090635		09/05/07 01:11
2-Chlorotoluene		55.2	MNR1	ug/L	50.0	110%	74 - 135	2	17	7090635		09/05/07 01:11
4-Chlorotoluene		57.6	MNR1	ug/L	50.0	115%	74 - 133	0.6	16	7090635		09/05/07 01:11
1,2-Dibromo-3-chloropropane		36.2	MNR1	ug/L	50.0	72%	45 - 140	1	20	7090635		09/05/07 01:11
1,2-Dibromoethane (EDB)		55.6	MNR1	ug/L	50.0	111%	80 - 132	1	16	7090635		09/05/07 01:11
Dibromomethane		51.0	MNR1	ug/L	50.0	102%	69 - 132	0.2	16	7090635		09/05/07 01:11
1,2-Dichlorobenzene		57.2	MNR1	ug/L	50.0	114%	82 - 133	1	16	7090635		09/05/07 01:11
1,3-Dichlorobenzene		59.1	MNR1	ug/L	50.0	118%	77 - 132	1	17	7090635		09/05/07 01:11
1,4-Dichlorobenzene		57.2	MNR1	ug/L	50.0	114%	79 - 125	0.6	16	7090635		09/05/07 01:11
Dichlorodifluoromethane		22.6	MNR1	ug/L	50.0	45%	34 - 120	0.7	21	7090635		09/05/07 01:11
1,2-Dichloroethane		55.4	MNR1	ug/L	50.0	111%	64 - 134	2	19	7090635		09/05/07 01:11
1,1-Dichloroethane		46.6	MNR1	ug/L	50.0	93%	79 - 120	22	17	7090635		09/05/07 01:11
1,1-Dichloroethene		58.9	MNR1	ug/L	50.0	118%	71 - 123	2	34	7090635		09/05/07 01:11
trans-1,2-Dichloroethene		61.8	MNR1	ug/L	50.0	124%	74 - 127	1	21	7090635		09/05/07 01:11
cis-1,2-Dichloroethene		51.3	MNR1	ug/L	50.0	103%	71 - 126	1	16	7090635		09/05/07 01:11
1,3-Dichloropropane		54.5	MNR1	ug/L	50.0	109%	80 - 128	2	16	7090635		09/05/07 01:11
2,2-Dichloropropane		49.1	MNR1	ug/L	50.0	98%	25 - 156	2	16	7090635		09/05/07 01:11
1,2-Dichloropropane		48.8	MNR1	ug/L	50.0	98%	73 - 120	2	15	7090635		09/05/07 01:11
trans-1,3-Dichloropropene		51.6	MNR1	ug/L	50.0	103%	61 - 124	1	19	7090635		09/05/07 01:11
1,1-Dichloropropene		57.1	MNR1	ug/L	50.0	114%	79 - 138	2	17	7090635		09/05/07 01:11

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA
LCS Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B												
7090635-BSD1												
cis-1,3-Dichloropropene	58.6	MNR1	ug/L	50.0	117%	70 - 135	1	19	7090635			09/05/07 01:11
Ethylbenzene	54.4	MNR1	ug/L	50.0	109%	73 - 134	2	15	7090635			09/05/07 01:11
Hexachlorobutadiene	64.8	MNR1	ug/L	50.0	130%	58 - 145	0.6	35	7090635			09/05/07 01:11
2-Hexanone	237	MNR1	ug/L	250	95%	72 - 136	2	18	7090635			09/05/07 01:11
Isopropylbenzene	57.6	MNR1	ug/L	50.0	115%	74 - 121	1	17	7090635			09/05/07 01:11
p-Isopropyltoluene	53.1	MNR1	ug/L	50.0	106%	70 - 133	1	21	7090635			09/05/07 01:11
Methyl Acetate	42.4	MNR1	ug/L	50.0	85%	58 - 185	12	21	7090635			09/05/07 01:11
Methyl tert-Butyl Ether	52.9	MNR1	ug/L	50.0	106%	69 - 122	1	16	7090635			09/05/07 01:11
Methylene Chloride	54.1	MNR1	ug/L	50.0	108%	75 - 127	1	19	7090635			09/05/07 01:11
4-Methyl-2-pentanone	237	MNR1	ug/L	250	95%	77 - 132	2	18	7090635			09/05/07 01:11
Naphthalene	36.5	MNR1	ug/L	50.0	73%	65 - 145	5	34	7090635			09/05/07 01:11
n-Propylbenzene	56.8	MNR1	ug/L	50.0	114%	76 - 133	1	18	7090635			09/05/07 01:11
Styrene	67.9	MNR1	ug/L	50.0	136%	80 - 145	1	22	7090635			09/05/07 01:11
1,1,2,2-Tetrachloroethane	43.8	MNR1	ug/L	50.0	88%	71 - 137	7	16	7090635			09/05/07 01:11
1,1,1,2-Tetrachloroethane	59.7	MNR1	ug/L	50.0	119%	72 - 136	4	16	7090635			09/05/07 01:11
Tetrachloroethene	57.8	MNR1	ug/L	50.0	116%	70 - 131	1	20	7090635			09/05/07 01:11
Toluene	54.2	MNR1	ug/L	50.0	108%	78 - 122	2	15	7090635			09/05/07 01:11
1,2,4-Trichlorobenzene	46.9	MNR1	ug/L	50.0	94%	63 - 140	3	26	7090635			09/05/07 01:11
1,2,3-Trichlorobenzene	46.2	MNR1	ug/L	50.0	92%	60 - 144	3	33	7090635			09/05/07 01:11
1,1,1-Trichloroethane	56.4	MNR1	ug/L	50.0	113%	69 - 128	2	17	7090635			09/05/07 01:11
1,1,2-Trichloroethane	54.8	MNR1	ug/L	50.0	110%	81 - 127	2	16	7090635			09/05/07 01:11
Trichloroethene	57.7	MNR1	ug/L	50.0	115%	73 - 133	3	17	7090635			09/05/07 01:11
Trichlorofluoromethane	51.2	MNR1	ug/L	50.0	102%	49 - 139	2	42	7090635			09/05/07 01:11
1,2,3-Trichloropropane	44.6	MNR1	ug/L	50.0	89%	52 - 151	2	18	7090635			09/05/07 01:11
1,3,5-Trimethylbenzene	58.4	MNR1	ug/L	50.0	117%	72 - 136	1	20	7090635			09/05/07 01:11
1,2,4-Trimethylbenzene	58.0	MNR1	ug/L	50.0	116%	73 - 134	2	18	7090635			09/05/07 01:11
Vinyl chloride	45.1	MNR1	ug/L	50.0	90%	54 - 137	3	50	7090635			09/05/07 01:11
o-Xylene	58.7	MNR1	ug/L	50.0	117%	79 - 130	0.7	16	7090635			09/05/07 01:11
m,p-Xylene	114	MNR1	ug/L	100	114%	79 - 131	1	16	7090635			09/05/07 01:11
Xylenes, total	172	MNR1	ug/L	150	115%	79 - 130	0.9	16	7090635			09/05/07 01:11
Surrogate: 1,2-Dichloroethane-d4	24.3		ug/L	25.0	97%	62 - 142			7090635			09/05/07 01:11
Surrogate: Dibromofluoromethane	22.9		ug/L	25.0	92%	78 - 123			7090635			09/05/07 01:11
Surrogate: Toluene-d8	25.0		ug/L	25.0	100%	79 - 120			7090635			09/05/07 01:11
Surrogate: 4-Bromofluorobenzene	22.8		ug/L	25.0	91%	75 - 133			7090635			09/05/07 01:11
7090635-BSD2												
Butyl acetate	484		ug/L	500	97%	12 - 172	17	50	7090635			09/05/07 02:00
Ethyl Acetate	635		ug/L	500	127%	12 - 172	19	50	7090635			09/05/07 02:00
Surrogate: 1,2-Dichloroethane-d4	32.6		ug/L	25.0	130%	62 - 142			7090635			09/05/07 02:00
Surrogate: Dibromofluoromethane	32.2	Z10	ug/L	25.0	129%	78 - 123			7090635			09/05/07 02:00
Surrogate: Toluene-d8	22.9		ug/L	25.0	92%	79 - 120			7090635			09/05/07 02:00

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA

LCS Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B												
7090635-BSD2												
Surrogate: 4-Bromofluorobenzene	24.3			ug/L	25.0	97%	75 - 133			7090635		09/05/07 02:00
7091613-BSD1												
Tert-Amyl Methyl Ether	54.9			ug/L	50.0	110%	63 - 133	4	16	7091613		09/07/07 14:39
Acetone	265			ug/L	250	106%	63 - 147	4	22	7091613		09/07/07 14:39
Ethyl tert-Butyl Ether	53.9			ug/L	50.0	108%	65 - 126	2	16	7091613		09/07/07 14:39
Acrylonitrile	262			ug/L	250	105%	76 - 125	1	15	7091613		09/07/07 14:39
Diisopropyl Ether	51.7			ug/L	50.0	103%	74 - 120	4	17	7091613		09/07/07 14:39
Benzene	50.4			ug/L	50.0	101%	78 - 125	1	15	7091613		09/07/07 14:39
Tertiary Butyl Alcohol	640			ug/L	500	128%	33 - 181	17	20	7091613		09/07/07 14:39
Bromobenzene	48.7			ug/L	50.0	97%	71 - 142	3	17	7091613		09/07/07 14:39
Bromochloromethane	49.1			ug/L	50.0	98%	76 - 129	0.2	15	7091613		09/07/07 14:39
Bromodichloromethane	59.8			ug/L	50.0	120%	71 - 134	0.7	17	7091613		09/07/07 14:39
Bromoform	58.1			ug/L	50.0	116%	49 - 129	2	19	7091613		09/07/07 14:39
Bromomethane	44.4			ug/L	50.0	89%	42 - 154	1	41	7091613		09/07/07 14:39
2-Butanone	250			ug/L	250	100%	74 - 130	5	17	7091613		09/07/07 14:39
tert-Butylbenzene	51.3			ug/L	50.0	103%	79 - 128	1	20	7091613		09/07/07 14:39
n-Butylbenzene	47.9			ug/L	50.0	96%	68 - 138	2	23	7091613		09/07/07 14:39
sec-Butylbenzene	53.2			ug/L	50.0	106%	78 - 129	2	21	7091613		09/07/07 14:39
Carbon disulfide	52.6			ug/L	50.0	105%	65 - 122	0.5	50	7091613		09/07/07 14:39
Carbon Tetrachloride	58.2			ug/L	50.0	116%	62 - 142	0.3	18	7091613		09/07/07 14:39
Chlorobenzene	50.5			ug/L	50.0	101%	82 - 125	3	15	7091613		09/07/07 14:39
Chlorodibromomethane	51.1			ug/L	50.0	102%	67 - 135	2	18	7091613		09/07/07 14:39
Chloroethane	44.4			ug/L	50.0	89%	57 - 138	0.8	36	7091613		09/07/07 14:39
Chloroform	52.3			ug/L	50.0	105%	75 - 122	2	16	7091613		09/07/07 14:39
Chloromethane	36.5			ug/L	50.0	73%	31 - 147	5	46	7091613		09/07/07 14:39
2-Chlorotoluene	46.8			ug/L	50.0	94%	74 - 135	1	17	7091613		09/07/07 14:39
4-Chlorotoluene	45.9			ug/L	50.0	92%	74 - 133	0.5	16	7091613		09/07/07 14:39
1,2-Dibromo-3-chloropropane	52.6			ug/L	50.0	105%	45 - 140	2	20	7091613		09/07/07 14:39
1,2-Dibromoethane (EDB)	49.1			ug/L	50.0	98%	80 - 132	2	16	7091613		09/07/07 14:39
Dibromomethane	58.5			ug/L	50.0	117%	69 - 132	9	16	7091613		09/07/07 14:39
1,2-Dichlorobenzene	46.7			ug/L	50.0	93%	82 - 133	0.2	16	7091613		09/07/07 14:39
1,3-Dichlorobenzene	47.3			ug/L	50.0	95%	77 - 132	0.2	17	7091613		09/07/07 14:39
1,4-Dichlorobenzene	48.4			ug/L	50.0	97%	79 - 125	1	16	7091613		09/07/07 14:39
Dichlorodifluoromethane	31.8			ug/L	50.0	64%	34 - 120	2	21	7091613		09/07/07 14:39
1,2-Dichloroethane	57.8			ug/L	50.0	116%	64 - 134	0.5	19	7091613		09/07/07 14:39
1,1-Dichloroethene	54.5			ug/L	50.0	109%	71 - 123	2	34	7091613		09/07/07 14:39
trans-1,2-Dichloroethene	54.4			ug/L	50.0	109%	74 - 127	0.7	21	7091613		09/07/07 14:39
cis-1,2-Dichloroethene	54.0			ug/L	50.0	108%	71 - 126	3	16	7091613		09/07/07 14:39
1,3-Dichloropropane	51.0			ug/L	50.0	102%	80 - 128	1	16	7091613		09/07/07 14:39
2,2-Dichloropropane	56.2			ug/L	50.0	112%	25 - 156	2	16	7091613		09/07/07 14:39

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA

LCS Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B												
7091613-BSD1												
1,2-Dichloropropane		44.1		ug/L	50.0	88%	73 - 120	2	15	7091613		09/07/07 14:39
trans-1,3-Dichloropropene		55.3		ug/L	50.0	111%	61 - 124	1	19	7091613		09/07/07 14:39
1,1-Dichloropropene		52.6		ug/L	50.0	105%	79 - 138	1	17	7091613		09/07/07 14:39
cis-1,3-Dichloropropene		52.2		ug/L	50.0	104%	70 - 135	0.3	19	7091613		09/07/07 14:39
Ethylbenzene		50.1		ug/L	50.0	100%	73 - 134	3	15	7091613		09/07/07 14:39
Hexachlorobutadiene		54.6		ug/L	50.0	109%	58 - 145	2	35	7091613		09/07/07 14:39
2-Hexanone		238		ug/L	250	95%	72 - 136	5	18	7091613		09/07/07 14:39
Isopropylbenzene		50.6		ug/L	50.0	101%	74 - 121	1	17	7091613		09/07/07 14:39
p-Isopropyltoluene		52.2		ug/L	50.0	104%	70 - 133	2	21	7091613		09/07/07 14:39
Methyl tert-Butyl Ether		52.5		ug/L	50.0	105%	69 - 122	4	16	7091613		09/07/07 14:39
Methylene Chloride		56.2		ug/L	50.0	112%	75 - 127	0.5	19	7091613		09/07/07 14:39
4-Methyl-2-pentanone		244		ug/L	250	98%	77 - 132	5	18	7091613		09/07/07 14:39
Naphthalene		56.0		ug/L	50.0	112%	65 - 145	0.8	34	7091613		09/07/07 14:39
n-Propylbenzene		48.5		ug/L	50.0	97%	76 - 133	2	18	7091613		09/07/07 14:39
Styrene		54.0		ug/L	50.0	108%	80 - 145	3	22	7091613		09/07/07 14:39
1,1,2,2-Tetrachloroethane		49.5		ug/L	50.0	99%	71 - 137	6	16	7091613		09/07/07 14:39
1,1,1,2-Tetrachloroethane		60.1		ug/L	50.0	120%	72 - 136	0.7	16	7091613		09/07/07 14:39
Tetrachloroethene		48.9		ug/L	50.0	98%	70 - 131	3	20	7091613		09/07/07 14:39
Toluene		49.7		ug/L	50.0	99%	78 - 122	0.8	15	7091613		09/07/07 14:39
1,2,4-Trichlorobenzene		47.6		ug/L	50.0	95%	63 - 140	0.1	26	7091613		09/07/07 14:39
1,2,3-Trichlorobenzene		51.0		ug/L	50.0	102%	60 - 144	2	33	7091613		09/07/07 14:39
1,1,1-Trichloroethane		55.9		ug/L	50.0	112%	69 - 128	4	17	7091613		09/07/07 14:39
1,1,2-Trichloroethane		51.6		ug/L	50.0	103%	81 - 127	0.9	16	7091613		09/07/07 14:39
Trichloroethene		52.1		ug/L	50.0	104%	73 - 133	0.6	17	7091613		09/07/07 14:39
Trichlorofluoromethane		57.2		ug/L	50.0	114%	49 - 139	0.8	42	7091613		09/07/07 14:39
1,2,3-Trichloropropane		46.8		ug/L	50.0	94%	52 - 151	4	18	7091613		09/07/07 14:39
1,3,5-Trimethylbenzene		49.3		ug/L	50.0	99%	72 - 136	2	20	7091613		09/07/07 14:39
1,2,4-Trimethylbenzene		50.4		ug/L	50.0	101%	73 - 134	0.04	18	7091613		09/07/07 14:39
Vinyl chloride		40.0		ug/L	50.0	80%	54 - 137	2	50	7091613		09/07/07 14:39
Xylenes, total		154		ug/L	150	103%	79 - 130	2	16	7091613		09/07/07 14:39
Surrogate: 1,2-Dichloroethane-d4		25.4		ug/L	25.0	102%	62 - 142			7091613		09/07/07 14:39
Surrogate: Dibromofluoromethane		24.8		ug/L	25.0	99%	78 - 123			7091613		09/07/07 14:39
Surrogate: Toluene-d8		23.4		ug/L	25.0	94%	79 - 120			7091613		09/07/07 14:39
Surrogate: 4-Bromofluorobenzene		22.5		ug/L	25.0	90%	75 - 133			7091613		09/07/07 14:39
Purgeable Petroleum Hydrocarbons												
7090564-BSD1												
GRO (C4-C12) NW		829		ug/L	1000	83%	66 - 125	2	27	7090564		09/06/07 03:36
Surrogate: a,a,a-Trifluorotoluene		37.1		ug/L	30.0	124%	46 - 153			7090564		09/06/07 03:36
7090564-BSD2												

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA
LCS Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Purgeable Petroleum Hydrocarbons												
7090564-BSD2												
GRO (C4-C12) NW		821		ug/L	1000	82%	66 - 125	3	27	7090564		09/06/07 09:15
Surrogate: a,a,a-Trifluorotoluene		37.1		ug/L	30.0	124%	46 - 153			7090564		09/06/07 09:15
7090910-BSD2												
GRO (C4-C12) NW		11.2		mg/kg	10.0	112%	72 - 126	20	37	7090910		09/06/07 19:42
Surrogate: a,a,a-Trifluorotoluene		33.5		ug/L	30.0	112%	52 - 145			7090910		09/06/07 19:42

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Total Metals by EPA Method 6010B										
7085913-MS1										
Lead	4.91	93.4		mg/kg	97.7	91%	75 - 125	7085913	NQH3510-02	09/07/07 06:32
Dissolved Metals by EPA Method 6010B										
7090249-MS1										
Lead	ND	0.0469		mg/L	0.0500	94%	75 - 125	7090249	NQH3676-07	09/06/07 00:51
Volatile Organic Compounds by EPA Method 8260B										
7090348-MS1										
Tertiary Butyl Alcohol	ND	339		ug/kg	500	68%	10 - 167	7090348	NQH0151-07	09/08/07 07:54
Diisopropyl Ether	ND	35.9		ug/kg	50.0	72%	43 - 131	7090348	NQH0151-07	09/08/07 07:54
Ethyl tert-Butyl Ether	ND	34.8		ug/kg	50.0	70%	45 - 136	7090348	NQH0151-07	09/08/07 07:54
Tert-Amyl Methyl Ether	ND	32.8		ug/kg	50.0	66%	37 - 149	7090348	NQH0151-07	09/08/07 07:54
Benzene	ND	45.2		ug/kg	50.0	90%	41 - 134	7090348	NQH0151-07	09/08/07 07:54
1,2-Dibromoethane (EDB)	ND	38.1		ug/kg	50.0	76%	33 - 147	7090348	NQH0151-07	09/08/07 07:54
1,2-Dichloroethane	ND	40.3		ug/kg	50.0	81%	39 - 143	7090348	NQH0151-07	09/08/07 07:54
Ethylbenzene	ND	45.0		ug/kg	50.0	90%	27 - 143	7090348	NQH0151-07	09/08/07 07:54
Isopropylbenzene	ND	42.7		ug/kg	50.0	85%	20 - 140	7090348	NQH0151-07	09/08/07 07:54
Methyl tert-Butyl Ether	ND	31.8		ug/kg	50.0	64%	26 - 147	7090348	NQH0151-07	09/08/07 07:54
n-Propylbenzene	ND	37.5		ug/kg	50.0	75%	12 - 160	7090348	NQH0151-07	09/08/07 07:54
Toluene	ND	46.6		ug/kg	50.0	93%	31 - 145	7090348	NQH0151-07	09/08/07 07:54
1,3,5-Trimethylbenzene	ND	40.8		ug/kg	50.0	82%	15 - 157	7090348	NQH0151-07	09/08/07 07:54
1,2,4-Trimethylbenzene	ND	38.9		ug/kg	50.0	78%	10 - 156	7090348	NQH0151-07	09/08/07 07:54
Xylenes, total	ND	136		ug/kg	150	91%	27 - 140	7090348	NQH0151-07	09/08/07 07:54
Surrogate: 1,2-Dichloroethane-d4		50.7		ug/kg	50.0	101%	54 - 145	7090348	NQH0151-07	09/08/07 07:54
Surrogate: Dibromofluoromethane		52.8		ug/kg	50.0	106%	67 - 129	7090348	NQH0151-07	09/08/07 07:54
Surrogate: Toluene-d8		50.0		ug/kg	50.0	100%	66 - 142	7090348	NQH0151-07	09/08/07 07:54
Surrogate: 4-Bromofluorobenzene		47.3		ug/kg	50.0	95%	68 - 150	7090348	NQH0151-07	09/08/07 07:54
Polyaromatic Hydrocarbons by EPA 8270C SIM										
7085875-MS1										
Acenaphthene	ND	0.0236		mg/kg	0.0323	73%	43 - 114	7085875	NQH2677-02R E1	09/02/07 23:49
Acenaphthylene	ND	0.0265		mg/kg	0.0323	82%	44 - 118	7085875	NQH2677-02R E1	09/02/07 23:49
Anthracene	ND	0.0294		mg/kg	0.0323	91%	45 - 139	7085875	NQH2677-02R E1	09/02/07 23:49
Benzo (a) anthracene	ND	0.0313		mg/kg	0.0323	97%	39 - 122	7085875	NQH2677-02R E1	09/02/07 23:49
Benzo (a) pyrene	ND	0.0255		mg/kg	0.0323	79%	41 - 117	7085875	NQH2677-02R E1	09/02/07 23:49

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA
Matrix Spike - Cont.

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270C SIM										
7085875-MS1										
Benzo (b) fluoranthene	ND	0.0184		mg/kg	0.0323	57%	15 - 157	7085875	NQH2677-02R E1	09/02/07 23:49
Benzo (g,h,i) perylene	ND	0.0332		mg/kg	0.0323	103%	10 - 146	7085875	NQH2677-02R E1	09/02/07 23:49
Benzo (k) fluoranthene	ND	0.0265		mg/kg	0.0323	82%	20 - 149	7085875	NQH2677-02R E1	09/02/07 23:49
Chrysene	ND	0.0268		mg/kg	0.0323	83%	18 - 155	7085875	NQH2677-02R E1	09/02/07 23:49
Dibenz (a,h) anthracene	ND	0.0349		mg/kg	0.0323	108%	10 - 163	7085875	NQH2677-02R E1	09/02/07 23:49
Fluoranthene	ND	0.0342		mg/kg	0.0323	106%	11 - 149	7085875	NQH2677-02R E1	09/02/07 23:49
Fluorene	ND	0.0284		mg/kg	0.0323	88%	26 - 149	7085875	NQH2677-02R E1	09/02/07 23:49
Indeno (1,2,3-cd) pyrene	ND	0.0307		mg/kg	0.0323	95%	10 - 147	7085875	NQH2677-02R E1	09/02/07 23:49
1-Methylnaphthalene	ND	0.0226		mg/kg	0.0326	69%	23 - 110	7085875	NQH2677-02R E1	09/02/07 23:49
2-Methylnaphthalene	ND	0.0242		mg/kg	0.0323	75%	34 - 114	7085875	NQH2677-02R E1	09/02/07 23:49
Naphthalene	ND	0.0216		mg/kg	0.0323	67%	36 - 113	7085875	NQH2677-02R E1	09/02/07 23:49
Phenanthrene	0.00165	0.0281		mg/kg	0.0323	82%	10 - 154	7085875	NQH2677-02R E1	09/02/07 23:49
Pyrene	ND	0.0287		mg/kg	0.0323	89%	10 - 173	7085875	NQH2677-02R E1	09/02/07 23:49
Surrogate: Nitrobenzene-d5		0.0300	Z10	mg/kg	0.0323	93%	34 - 87	7085875	NQH2677-02R E1	09/02/07 23:49
Surrogate: 2-Fluorobiphenyl		0.0239		mg/kg	0.0323	74%	30 - 93	7085875	NQH2677-02R E1	09/02/07 23:49
Surrogate: Terphenyl-d14		0.0326		mg/kg	0.0323	101%	49 - 123	7085875	NQH2677-02R E1	09/02/07 23:49
Extractable Petroleum Hydrocarbons										
7085991-MS1										
Diesel	ND	36.6		mg/kg	38.7	95%	35 - 145	7085991	NQH3673-03	09/01/07 23:19
Surrogate: o-Terphenyl		0.854		mg/kg	0.773	110%	50 - 150	7085991	NQH3673-03	09/01/07 23:19
Purgeable Petroleum Hydrocarbons										
7090564-MS1										
GRO (C4-C12) NW	1200	2130		ug/L	1000	93%	28 - 181	7090564	NQH3608-04	09/06/07 11:54
Surrogate: a,a,a-Trifluorotoluene		40.5		ug/L	30.0	135%	46 - 153	7090564	NQH3608-04	09/06/07 11:54

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA

Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Total Metals by EPA Method 6010B												
7085913-MSD1												
Lead	4.91	94.5		mg/kg	99.2	90%	75 - 125	1	20	7085913	NQH3510-02	09/07/07 06:36
Dissolved Metals by EPA Method 6010B												
7090249-MSD1												
Lead	ND	0.0454		mg/L	0.0500	91%	75 - 125	3	20	7090249	NQH3676-07	09/06/07 00:55
Volatile Organic Compounds by EPA Method 8260B												
7090348-MSD1												
Tertiary Butyl Alcohol	ND	312		ug/kg	500	62%	10 - 167	8	47	7090348	NQI0151-07	09/08/07 08:25
Diisopropyl Ether	ND	32.2		ug/kg	50.0	64%	43 - 131	11	40	7090348	NQI0151-07	09/08/07 08:25
Ethyl tert-Butyl Ether	ND	31.0		ug/kg	50.0	62%	45 - 136	11	50	7090348	NQI0151-07	09/08/07 08:25
Tert-Amyl Methyl Ether	ND	29.6		ug/kg	50.0	59%	37 - 149	10	43	7090348	NQI0151-07	09/08/07 08:25
Benzene	ND	40.9		ug/kg	50.0	82%	41 - 134	10	42	7090348	NQI0151-07	09/08/07 08:25
1,2-Dibromoethane (EDB)	ND	32.9		ug/kg	50.0	66%	33 - 147	15	50	7090348	NQI0151-07	09/08/07 08:25
1,2-Dichloroethane	ND	36.0		ug/kg	50.0	72%	39 - 143	11	42	7090348	NQI0151-07	09/08/07 08:25
Ethylbenzene	ND	40.8		ug/kg	50.0	82%	27 - 143	10	42	7090348	NQI0151-07	09/08/07 08:25
Isopropylbenzene	ND	40.9		ug/kg	50.0	82%	20 - 140	4	44	7090348	NQI0151-07	09/08/07 08:25
Methyl tert-Butyl Ether	ND	28.5		ug/kg	50.0	57%	26 - 147	11	47	7090348	NQI0151-07	09/08/07 08:25
n-Propylbenzene	ND	35.8		ug/kg	50.0	72%	12 - 160	5	50	7090348	NQI0151-07	09/08/07 08:25
Toluene	ND	41.8		ug/kg	50.0	84%	31 - 145	11	50	7090348	NQI0151-07	09/08/07 08:25
1,3,5-Trimethylbenzene	ND	38.0		ug/kg	50.0	76%	15 - 157	7	50	7090348	NQI0151-07	09/08/07 08:25
1,2,4-Trimethylbenzene	ND	36.1		ug/kg	50.0	72%	10 - 156	8	50	7090348	NQI0151-07	09/08/07 08:25
Xylenes, total	ND	124		ug/kg	150	82%	27 - 140	10	50	7090348	NQI0151-07	09/08/07 08:25
Surrogate: 1,2-Dichloroethane-d4		51.3		ug/kg	50.0	103%	54 - 145			7090348	NQI0151-07	09/08/07 08:25
Surrogate: Dibromofluoromethane		53.3		ug/kg	50.0	107%	67 - 129			7090348	NQI0151-07	09/08/07 08:25
Surrogate: Toluene-d8		49.3		ug/kg	50.0	99%	66 - 142			7090348	NQI0151-07	09/08/07 08:25
Surrogate: 4-Bromofluorobenzene		47.4		ug/kg	50.0	95%	68 - 150			7090348	NQI0151-07	09/08/07 08:25
Polyaromatic Hydrocarbons by EPA 8270C SIM												
7085875-MSD1												
Acenaphthene	ND	0.0289		mg/kg	0.0328	88%	43 - 114	20	38	7085875	NQH2677-02R	09/03/07 00:09
Acenaphthylene	ND	0.0305		mg/kg	0.0328	93%	44 - 118	14	40	7085875	NQH2677-02R	09/03/07 00:09
Anthracene	ND	0.0305		mg/kg	0.0328	93%	45 - 139	4	37	7085875	NQH2677-02R	09/03/07 00:09
Benzo (a) anthracene	ND	0.0325		mg/kg	0.0328	99%	39 - 122	4	37	7085875	NQH2677-02R	09/03/07 00:09
Benzo (a) pyrene	ND	0.0266		mg/kg	0.0328	81%	41 - 117	4	37	7085875	NQH2677-02R	09/03/07 00:09
Benzo (b) fluoranthene	ND	0.0410	R	mg/kg	0.0328	125%	15 - 157	76	50	7085875	NQH2677-02R	09/03/07 00:09
Benzo (g,h,i) perylene	ND	0.0341		mg/kg	0.0328	104%	10 - 146	3	50	7085875	NQH2677-02R	09/03/07 00:09

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP I21704
Received: 08/30/07 08:10

PROJECT QUALITY CONTROL DATA
Matrix Spike Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270C SIM												
7085875-MSD1												
Benzo (k) fluoranthene	ND	0.0230		mg/kg	0.0328	70%	20 - 149	14	50	7085875	NQH2677-02R E1	09/03/07 00:09
Chrysene	ND	0.0279		mg/kg	0.0328	85%	18 - 155	4	50	7085875	NQH2677-02R E1	09/03/07 00:09
Dibenz (a,h) anthracene	ND	0.0358		mg/kg	0.0328	109%	10 - 163	3	42	7085875	NQH2677-02R E1	09/03/07 00:09
Fluoranthene	ND	0.0364		mg/kg	0.0328	111%	11 - 149	6	43	7085875	NQH2677-02R E1	09/03/07 00:09
Fluorene	ND	0.0315		mg/kg	0.0328	96%	26 - 149	10	30	7085875	NQH2677-02R E1	09/03/07 00:09
Indeno (1,2,3-cd) pyrene	ND	0.0315		mg/kg	0.0328	96%	10 - 147	3	50	7085875	NQH2677-02R E1	09/03/07 00:09
1-Methylnaphthalene	ND	0.0276		mg/kg	0.0331	83%	23 - 110	20	43	7085875	NQH2677-02R E1	09/03/07 00:09
2-Methylnaphthalene	ND	0.0295		mg/kg	0.0328	90%	34 - 114	20	44	7085875	NQH2677-02R E1	09/03/07 00:09
Naphthalene	ND	0.0266		mg/kg	0.0328	81%	36 - 113	21	353	7085875	NQH2677-02R E1	09/03/07 00:09
Phenanthrene	0.00165	0.0292		mg/kg	0.0328	84%	10 - 154	4	50	7085875	NQH2677-02R E1	09/03/07 00:09
Pyrene	ND	0.0312		mg/kg	0.0328	95%	10 - 173	8	50	7085875	NQH2677-02R E1	09/03/07 00:09
Surrogate: Nitrobenzene-d5		0.0341	Z10	mg/kg	0.0328	104%	34 - 87			7085875	NQH2677-02R E1	09/03/07 00:09
Surrogate: 2-Fluorobiphenyl		0.0279		mg/kg	0.0328	85%	30 - 93			7085875	NQH2677-02R E1	09/03/07 00:09
Surrogate: Terphenyl-d14		0.0315		mg/kg	0.0328	96%	49 - 123			7085875	NQH2677-02R E1	09/03/07 00:09
Extractable Petroleum Hydrocarbons												
7085991-MSD1												
Diesel	ND	32.5		mg/kg	39.9	81%	35 - 145	12	43	7085991	NQH3673-03	09/01/07 23:34
Surrogate: o-Terphenyl		0.848		mg/kg	0.798	106%	50 - 150			7085991	NQH3673-03	09/01/07 23:34
Purgeable Petroleum Hydrocarbons												
7090564-MSD1												
GRO (C4-C12) NW	1200	2250		ug/L	1000	105%	28 - 181	5	27	7090564	NQH3608-04	09/06/07 12:22
Surrogate: a,a,a-Trifluorotoluene		41.8		ug/L	30.0	139%	46 - 153			7090564	NQH3608-04	09/06/07 12:22

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

CERTIFICATION SUMMARY

TestAmerica - Nashville, TN

Method	Matrix	AIHA	Nelac	Oregon
NWTPH-Dx	Soil	N/A	X	X
NWTPH-Dx	Water	N/A	X	X
NWTPH-Gx	Soil	N/A	X	X
NWTPH-Gx	Water	N/A	X	X
SW846 6010B	Soil	N/A	X	X
SW846 6010B	Water	N/A	X	X
SW846 8260B	Soil	N/A	X	X
SW846 8260B	Water	N/A	X	X
SW846 8270CSIM	Soil	N/A	X	X
SW846 8270CSIM	Water	N/A	X	X

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

NELAC CERTIFICATION SUMMARY

TestAmerica Analytical - Nashville does not hold NELAC certifications for the following analytes included in this report

Method
NWTPH-Gx

Matrix
Soil
Water

Analyte
GRO (C4-C12) NW
GRO (C4-C12) NW

Client Delta Environmental (Minnesota) / Shell
5910 Rice Creek Pkwy, Ste 100
St. Paul, MN 55126
Attn Mike Lee

Work Order: NQH3608
Project Name: 14951 SW Bangy Lane, Lake Oswego, OR
Project Number: SAP 121704
Received: 08/30/07 08:10

DATA QUALIFIERS AND DEFINITIONS

C Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
C4 Calibration Verification recovery was below the method control limit for this analyte.
H2 Initial analysis within holding time. Reanalysis for the required dilution or confirmation was past holding time.
MNR1 There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike.
QP1 The primary contamination elutes between C18 - C40, which is in the motor oil range.
QP3 The primary contamination elutes between C8 - C18, which is in the kerosene range.
QP3a The primary contamination elutes between C8 - C18, which is in the kerosene range.
QP6 The contamination did not match any standards in our library.
R The RPD exceeded the method control limit. The individual analyte QA/QC recoveries, however, were within acceptance limits.
R7 LCS/LCSD RPD exceeded the acceptance limit. Recovery met acceptance criteria.
Z10 Surrogate outside laboratory historical limits but within method guidelines. No effect on data.
ND Not detected at the reporting limit (or method detection limit if shown)

METHOD MODIFICATION NOTES



COOLER RECEIPT FORM



NQH3608

Cooler Received/Opened On 8-30-07 8:101. Tracking # 8747 (last 4 digits, FedEx)Courier: Fed-Ex IR Gun ID 1015072. Temperature of rep. sample or temp blank when opened: 2.5 Degrees Celsius3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) WS7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial) JR

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

If preservation in-house was needed, record standard ID of preservative used here _____

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) JR

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) JRI certify that I attached a label with the unique LIMS number to each container (initial) JR

21. Were there Non-Conformance issues at login? YES...NO... Was a PIPE generated? YES...NO...# _____



COOLER RECEIPT FORM

Cooler Received/Opened On: 8/30/07 @ 8:10

Tracking # 9015

Fed-Ex Gun ID: 92171982

1. Temperature of rep. sample or temp blank when opened: 42 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler?

YES NO NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly?

YES NO NA

6. Were custody papers inside cooler?

YES NO NA

I certify that I opened the cooler and answered questions 1-6 (initial) JK

7. Were custody seals on containers:

YES NO

and Intact

YES NO NA

Were these signed and dated correctly?

YES NO NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None NO

9. Cooling process:

Ice

Ice-pack Ice (direct contact) Dry Ice Other None

10. Did all containers arrive in good condition (unbroken)?

YES NO NA

11. Were all container labels complete (#, date, signed, pres., etc)?

YES NO NA

12. Did all container labels and tags agree with custody papers?

YES NO NA

13a. Were VOA vials received?

YES NO NA

b. Was there any observable headspace present in any VOA vial?

YES NO NA

14. Was there a Trip Blank in this cooler?

YES NO NA

If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial) JK

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO NA

b. Did the bottle labels indicate that the correct preservatives were used

YES NO NA

If preservation in-house was needed, record standard ID of preservative used here _____

16. Was residual chlorine present?

YES NO NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) JK

17. Were custody papers properly filled out (ink, signed, etc)?

YES NO NA

18. Did you sign the custody papers in the appropriate place?

YES NO NA

19. Were correct containers used for the analysis requested?

YES NO NA

20. Was sufficient amount of sample sent in each container?

YES NO NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) JK

I certify that I attached a label with the unique LIMS number to each container (initial) JK

21. Were there Non-Conformance issues at login? YES NO Was a PIPE generated? YES NO # _____

APPENDIX C
COPIES of WASTE DISPOSAL MANIFESTS
(as applicable and available)



Project No.

Shell

Client

WASTE INVENTORY RECORD

121704

Location/SS#

Sarah Milliken

Field Technician

Page 1 of 1

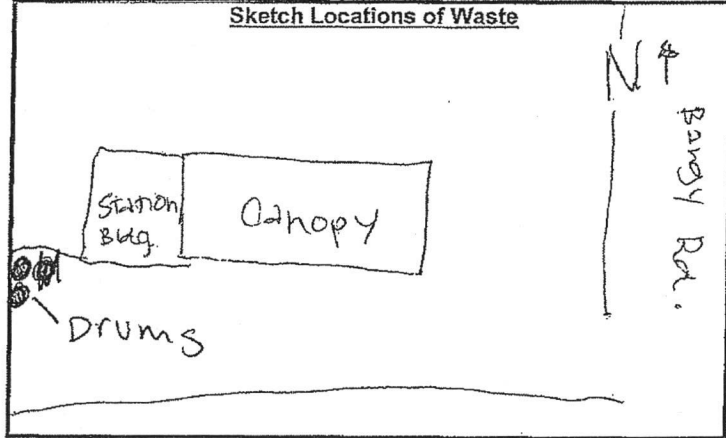
8/23/04

Date Generated

Date Removed

[illegible]

Sketch Locations of Waste



Stock Pile on Site & Volume



Total Number of
Drums at Site

2

Shell Pipeline Company LP
Residual Information Pick-Up Request (RIPR)

RDC: RAY WALDING

RIPR Date 08/29/2007

RIPR # 63578

Engineer: KREMER, DAVID

Phone / Fax: 916-853-8906 / 916-636-3208

Facility / SAP Cost Center: 121704
County:

Region/Dist/Area: RETAIL - PACIFIC NORTH

Address: 14951 S W BANGY LANE
LAKE OSWEGO, OR 97034-0000

Remediation: YES SAP Cost Element: 276501
Other Info:

Incident #: 97718932

Send Copies: Reimb. Invoice NO

Direct Pay: NO

Company:
Contact:

Consultant / Contractor Information

Company: DELTA ENVIRONMENTAL CONSULTANT

Contact: SCHATZ, JEFF

Address: 7150 SW HAMPTON #220
TIGARD, OR 97231

Type of Facility: SHELL

Phone / Fax: 5036398098 / 5036397619

Material Description

Free Liquids: YES

DECON WATER

Process Generating this Residual

DECONTAMINATION OF EQUIPMENT

Accumulation Date: 08/27/2007

Sampling Date (if applicable):

Container Information:

Drums: Quantity / Type: 1

55-GALLON STEEL

Id #: DC-1

Bins: Quantity / Size:

Supplied by:

Bulk Pile: Indicator / Size: NO

Other Container:

Volume:

Container Description:

Contents/Prev. Contents:

Requirements or conditions associated with pick-up:

Comments or suggestions for local vendor:

Form Filled Out by:

Name: SCHATZ, JEFF

Date 08/29/2007

Email: JSCHATZ@DELTAENV.COM

Phone / Fax: 5036398098 / 5036397619

Shell Pipeline Company LP
Residual Information Pick-Up Request (RIPR)

RDC: RAY WALDING

RIPR Date 08/29/2007

RIPR # 63576

Engineer: KREMER, DAVID

Phone / Fax: 916-853-8906 / 916-636-3208

Facility / SAP Cost Center: 121704
County:

Region/Dist/Area: RETAIL - PACIFIC NORTH

Address: 14951 S W BANGY LANE
LAKE OSWEGO, OR 97034-0000

Remediation: YES SAP Cost Element: 276501

Incident #: 97718932

Send Copies: Reimb. Invoice NO

Direct Pay: NO

Other Info:

Company:
Contact:

Consultant / Contractor Information

Company: DELTA ENVIRONMENTAL CONSULTANT

Contact: SCHATZ, JEFF

Address: 7150 SW HAMPTON #220
TIGARD, OR 97231

Type of Facility: SHELL

Phone / Fax: 5036398098 / 5036397619

Material Description

Free Liquids: NO

SOIL

Process Generating this Residual

AIRKNIFING AND DRILLING

Accumulation Date: 08/27/2007

Sampling Date (if applicable):

08/27/2007

Container Information:

Drums: Quantity / Type: 3

55-GALLON STEEL

Id #: AK-1, AK-2 & DR-1

Bins: Quantity / Size:

Supplied by:

Bulk Pile: Indicator / Size: NO

Other Container:

Volume:

Container Description:

Contents/Prev. Contents:

Requirements or conditions associated with pick-up:

Comments or suggestions for local vendor:

Form Filled Out by:

Name: SCHATZ, JEFF

Date 08/29/2007

Email: JSCHATZ@DELTAENV.COM

Phone / Fax: 5036398098 / 5036397619

181704

Generator's Nonhazardous Waste Profile Sheet

Requested Disposal Facility Hillsboro Landfill Profile Number 101653OR☐ Renewal for Profile Number _____ Waste Approval Expiration Date _____**A. Waste Generator Facility Information (must reflect location of waste generation/origin)**

1. Generator Name: Shell Oil Products US
2. Site Address: 14951 S W Bangy Lane 7. Email Address: bkeller@deltaenv.com
3. City/ZIP: _____ 8. Phone: 701-537-5365 9. FAX: _____
4. State: OR 10. NAICS Code: _____
5. County: _____ 11. Generator USEPA ID #: _____
6. Contact Name/Title: Britney Keller/ Delta Consultants 12. State ID# (if applicable): _____

B. Customer Information ☐ same as above

P. O. Number: _____

1. Customer Name: Shell Oil Products US 6. Phone: 916-853-8906 FAX: _____
2. Billing Address: PO Box 4912 7. Transporter Name: _____
3. City, State and ZIP: Houston, TX, 77210 8. Transporter ID # (if appl.): _____
4. Contact Name: David Kremer 9. Transporter Address: _____
5. Contact Email: david.kremer@shell.com 10. City, State and ZIP: _____

C. Waste Stream Information

1. DESCRIPTION

- a. Common Waste Name: non-hazardous soil cuttings
- State Waste Code(s): _____

b. Describe Process Generating Waste or Source of Contamination:

Drilling activities at Shell Gasoline station

- c. Typical Color(s): _____

- d. Strong Odor? ☐ Yes ☒ No Describe: _____

- e. Physical State at 70°F: ☒ Solid ☐ Liquid ☐ Powder ☐ Semi-Solid or Sludge ☐ Other: _____

- f. Layers? ☒ Single layer ☐ Multi-layer ☐ NA

- g. Water Reactive? ☐ Yes ☒ No If Yes, Describe: _____

- h. Free Liquid Range (%): _____ to _____ ☒ NA(solid)

- i. pH Range: ☐ ≤2 ☐ 2.1-12.4 ☐ ≥12.5 ☒ NA(solid) ☐ Actual: _____

- j. Liquid Flash Point: ☐ <140°F ☐ ≥140°F ☒ NA(solid) ☐ Actual: _____

- k. Flammable Solid: ☐ Yes ☒ No

- l. Physical Constituents: List all constituents of waste stream - (e.g. Soil 0-80%, Wood 0-20%): ☒ (See Attached)

Constituents (Total Composition Must be > 100%)	Lower Range	Unit of Measure	Upper Range	Unit of Measure
1. Soil	100			
2. see attached analytical data			X	X
3. X			X	X
4. X			X	X
5. _____				
6. _____				

2. ESTIMATED QUANTITY OF WASTE AND SHIPPING INFORMATION

- a. ☒ Event ☐ Base/Ongoing (Check One)
- b. Estimated Annual Quantity: 3 ☐ Tons ☐ Cubic Yards ☒ Drums ☐ Gallons ☐ Other (specify): _____
- c. Shipping Frequency: 1 Units per ☐ Month ☐ Quarter ☐ Year ☒ One Time ☐ Other
- d. Is this a U.S. Department of Transportation (USDOT) Hazardous Material? (If yes, answer e.) ☐ Yes ☒ No
- e. USDOT Shipping Description (if applicable): _____

3. SAFETY REQUIREMENTS (Handling, PPE, etc.): Wear appropriate PPE



Generator's Nonhazardous Waste Profile Sheet

101653OR

D. Regulatory Status (Please check appropriate responses)

1. Is this a USEPA (40 CFR Part 261)/State hazardous waste? If yes, contact your sales representative. ☐ Yes ☒ No
2. Is this waste included in one or more of categories below (Check all that apply)? If yes, attach supporting documentation. ☒ Yes ☐ No
 - ☐ Delisted Hazardous Waste ☒ Excluded Wastes Under 40 CFR 261.4
 - ☐ Treated Hazardous Waste Debris ☐ Treated Characteristic Hazardous Waste
3. Is the waste from a Federal (40 CFR 300, Appendix B) or state mandated clean-up? If yes, see instructions. ☐ Yes ☒ No
4. Does the waste represented by this waste profile sheet contain radioactive material? ☐ Yes ☒ No
 - a. If yes, is disposal regulated by the Nuclear Regulatory Commission? ☐ Yes ☐ No
 - b. If yes, is disposal regulated by a State Agency for radioactive waste/NORM? ☐ Yes ☐ No
5. Does the waste represented by this waste profile sheet contain concentrations of regulated Polychlorinated Biphenyls (PCBs)? ☐ Yes ☒ No
 - a. If yes, is disposal regulated under TSCA? ☐ Yes ☐ No
6. Does the waste contain untreated, regulated, medical or infectious waste? ☐ Yes ☒ No
7. Does the waste contain asbestos? ☐ Yes ☒ No
If Yes, ☐ Friable ☐ Non Friable
8. Is this profile for remediation waste from a facility that is a major source of Hazardous Air Pollutants (Site Remediation NESHAP, 40 CFR 63 subpart GGGGG)? ☐ Yes ☒ No
If yes, does the waste contain <500 ppmw VOHAPs at the point of determination? ☐ Yes ☐ No

E. Generator Certification (Please read and certify by signature below)

By signing this Generator's Waste Profile Sheet, I hereby certify that all:

1. Information submitted in this profile and all attached documents contain true and accurate descriptions of the waste material;
2. Relevant information within the possession of the Generator regarding known or suspected hazards pertaining to this waste has been disclosed to WM/the Contractor;
3. Analytical data attached pertaining to the profiled waste was derived from testing a representative sample in accordance with 40 CFR 261.20(c) or equivalent rules; and
4. Changes that occur in the character of the waste (i.e. changes in the process or new analytical) will be identified by the Generator and disclosed to WM (and the Contractor if applicable) prior to providing the waste to WM (and the Contractor if applicable).
5. Check all that apply:

☒ Attached analytical pertains to the waste. Identify laboratory & sample ID #'s and parameters tested: _____

Pages: _____

☐ Only the analyses identified on the attachment pertain to the waste (identify by laboratory & sample ID #'s and parameters tested).
Attachment #: _____

☐ Additional information necessary to characterize the profiled waste has been attached (other than analytical).

Indicate the number of attached pages: _____

☒ I am an agent signing on behalf of the Generator, and the delegation of authority to me from the Generator for this signature is available upon request.

☐ By Generator process knowledge, the following waste is not a listed waste and is below all TCLP regulatory limits.

Certification Signature: _____

Title: Project Manager

Company Name: Delta Consultants

Name (Print): Gary Turgeon on behalf of Shell OPUS

Date: 9/26/07

FOR WM USE ONLY

Management Method: ☐ Landfill ☐ Bioremediation

Approval Decision: ☐ Approved ☐ Not Approved

☐ Non-hazardous solidification ☐ Other: _____

Waste Approval Expiration Date: _____

Management Facility Precautions, Special Handling Procedures or Limitation

☐ Shall not contain free liquid

on approval: _____

☐ Shipment must be scheduled into disposal facility

☐ Approval Number must accompany each shipment

☐ Waste Manifest must accompany load

WM Authorization Name / Title: _____

Date: _____

State Authorization (if Required): _____

Date: _____

Generator's Nonhazardous Waste Profile Sheet



Requested Disposal Facility Hillsboro Landfill

Profile Number 101652OR

☐ Renewal for Profile Number _____

Waste Approval Expiration Date _____

A. Waste Generator Facility Information (must reflect location of waste generation/origin)

1. Generator Name: Shell Oil Products US
2. Site Address: 1495 S W Bangy Lane
3. City/ZIP: _____
4. State: OR
5. County: _____
6. Contact Name/Title: Britney Keller/ Delta Consultants
7. Email Address: bkeller@deltaenv.com
8. Phone: 701-537-5365
9. FAX: _____
10. NAICS Code: _____
11. Generator USEPA ID #: _____
12. State ID# (if applicable): _____

B. Customer Information ☐ same as above

P. O. Number: _____

1. Customer Name: Shell Oil Products US
2. Billing Address: PO Box 4912
3. City, State and ZIP: Houston, TX, 77210
4. Contact Name: David Kremer
5. Contact Email: david.kremer@shell.com
6. Phone: 916-853-8906
7. Transporter Name: _____
8. Transporter ID # (if appl.): _____
9. Transporter Address: _____
10. City, State and ZIP: _____

C. Waste Stream Information

1. DESCRIPTION

a. Common Waste Name: non-hazardous decon water

State Waste Code(s): _____

b. Describe Process Generating Waste or Source of Contamination:

Decontamination of drilling equipment used at Shell Gasoline station

c. Typical Color(s): _____

d. Strong Odor? ☐ Yes ☒ No Describe: _____

e. Physical State at 70°F: ☐ Solid ☒ Liquid ☐ Powder ☐ Semi-Solid or Sludge ☐ Other: _____

f. Layers? ☒ Single layer ☐ Multi-layer ☐ NA

g. Water Reactive? ☐ Yes ☒ No If Yes, Describe: _____

h. Free Liquid Range (%): 99 to 100 ☐ NA(solid)

i. pH Range: ☐ ≤2 ☒ 2.1-12.4 ☐ ≥12.5 ☐ NA(solid) Actual: _____

j. Liquid Flash Point: ☐ < 140°F ☒ ≥ 140°F ☐ NA(solid) Actual: _____

k. Flammable Solid: ☐ Yes ☒ No

l. Physical Constituents: List all constituents of waste stream - (e.g. Soil 0-80%, Wood 0-20%): ☒ (See Attached)

Constituents (Total Composition Must be > 100%)	Lower Range	Unit of Measure	Upper Range	Unit of Measure
1. <u>Water</u>	<u>99 to 100</u>			
2. <u>Soil</u>	<u>0 to 1</u>			
3. _____				
4. _____				
5. _____				
6. _____				

2. ESTIMATED QUANTITY OF WASTE AND SHIPPING INFORMATION

a. ☒ Event ☐ Base/Ongoing (Check One)

b. Estimated Annual Quantity: 1 ☐ Tons ☐ Cubic Yards ☒ Drums ☐ Gallons ☐ Other (specify): _____

c. Shipping Frequency: 1 Units per ☐ Month ☐ Quarter ☐ Year ☒ One Time ☐ Other

d. Is this a U.S. Department of Transportation (USDOT) Hazardous Material? (If yes, answer e.) ☐ Yes ☒ No

e. USDOT Shipping Description (if applicable): _____

3. SAFETY REQUIREMENTS (Handling, PPE, etc.): Wear appropriate PPE



Generator's Nonhazardous Waste Profile Sheet

101652OR

D. Regulatory Status (Please check appropriate responses)

1. Is this a USEPA (40 CFR Part 261)/State hazardous waste? If yes, contact your sales representative. ☐ Yes ☒ No
2. Is this waste included in one or more of categories below (Check all that apply)? If yes, attach supporting documentation. ☒ Yes ☐ No
 - ☐ Delisted Hazardous Waste ☒ Excluded Wastes Under 40 CFR 261.4
 - ☐ Treated Hazardous Waste Debris ☐ Treated Characteristic Hazardous Waste
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4. Does the waste represented by this waste profile sheet contain radioactive material? ☐ Yes ☐ No
 - a. If yes, is disposal regulated by the Nuclear Regulatory Commission? ☐ Yes ☐ No
 - b. If yes, is disposal regulated by a State Agency for radioactive waste/NORM? ☐ Yes ☐ No
5. Does the waste represented by this waste profile sheet contain concentrations of regulated Polychlorinated Biphenyls (PCBs)? ☐ Yes ☒ No
 - a. If yes, is disposal regulated under TSCA? ☐ Yes ☐ No
6. Does the waste contain untreated, regulated, medical or infectious waste? ☐ Yes ☒ No
7. Does the waste contain asbestos? ☐ Yes ☒ No If Yes, ☐ Friable ☐ Non Friable
8. Is this profile for remediation waste from a facility that is a major source of Hazardous Air Pollutants (Site Remediation NESHAP, 40 CFR 63 subpart GGGGG)? ☐ Yes ☒ No

If yes, does the waste contain <500 ppmw VOHAPs at the point of determination? ☐ Yes ☐ No

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1. Information submitted in this profile and all attached documents contain true and accurate descriptions of the waste material;
2. Relevant information within the possession of the Generator regarding known or suspected hazards pertaining to this waste has been disclosed to WM/the Contractor;
3. Analytical data attached pertaining to the profiled waste was derived from testing a representative sample in accordance with 40 CFR 261.20(c) or equivalent rules; and
4. Changes that occur in the character of the waste (i.e. changes in the process or new analytical) will be identified by the Generator and disclosed to WM (and the Contractor if applicable) prior to providing the waste to WM (and the Contractor if applicable).
5. Check all that apply:

☒ Attached analytical pertains to the waste. Identify laboratory & sample ID #'s and parameters tested: _____

Pages: _____

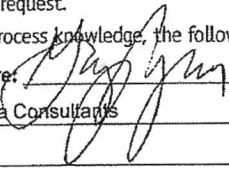
☐ Only the analyses identified on the attachment pertain to the waste (identify by laboratory & sample ID #'s and parameters tested).
Attachment #: _____

☐ Additional information necessary to characterize the profiled waste has been attached (other than analytical).

Indicate the number of attached pages: _____

☒ I am an agent signing on behalf of the Generator, and the delegation of authority to me from the Generator for this signature is available upon request.

☐ By Generator process knowledge, the following waste is not a listed waste and is below all TCLP regulatory limits.

Certification Signature: 

Title: Project Manager

Company Name: Delta Consultants

Name (Print): Gary Turgeon on behalf of Shell OPUS

Date: 9/26/07

FOR WM USE ONLY

Management Method: ☐ Landfill ☐ Bioremediation

Approval Decision: ☐ Approved ☐ Not Approved

☐ Non-hazardous solidification ☐ Other: _____

Waste Approval Expiration Date: _____

Management Facility Precautions, Special Handling Procedures or Limitation on approval: _____

☐ Shall not contain free liquid

☐ Shipment must be scheduled into disposal facility

☐ Approval Number must accompany each shipment

☐ Waste Manifest must accompany load

WM Authorization Name / Title: _____

Date: _____

State Authorization (if Required): _____

Date: _____

APPENDIX D
COPIES of RELEASE NOTIFICATIONS to AGENCY and RESPONSE

FW OLPRR Incident Report in Accepted Status. Log Number 03-07-1448.txt
From: Kevin McCarthy
Sent: Wednesday, September 26, 2007 2:57 PM
To: Gary Turgeon
Cc: Jeff Schatz
Subject: FW: OLPRR Incident Report in Accepted Status. Log Number:
03-07-1448

-----Original Message-----

From: CLARK Liz [mailto:clark.liz@deq.state.or.us]
Sent: Tuesday, September 25, 2007 11:37 AM
To: Kevin McCarthy
Subject: OLPRR Incident Report in Accepted Status. Log Number: 03-07-1448

Your on-line tank data submittal has been reviewed and accepted by the State of Oregon DEQ. New LUST Incident Log Number: 03-07-1448

Reported by: KEVIN MCCARTHY
Company Name: DELTA ENVIRONMENTAL CONSULTANTS INC.
Phone Number: (503) 639-8098 X108

Site Name: SHELL 121704
Site Address: 14951 Bangy Road
Site County: CLACKAMAS
Site City: LAKE OSWEGO
Site Zip Code: 97035

Comments: EVIDENCE OF A RELEASE WAS NOTED DURING REVIEW OF LABORATORY ANALYTICAL DATA GENERATED DURING DUE DILIGENCE SUBSURFACE INVESTIGATION AT THE SITE. THIS REPORT SHOW DETECTIONS OF PETROLEUM CONSTITUENTS IN GROUNDWATER THAT EXCEED THE ODEQ RBS. THE HIGHEST CONCENTRATIONS ARE IN SBS #3 AND 4. NOTABLE WERE CONCENTRATION IN SB-3 OF BENZENE 2.13 UG/L (RBC 0.35); 1,3,5 TMB OF 19.9 UG/L (RBC OF 11); TMB 1,2,4 OF 25 UG/L (RBC OF 11) AND NWT PH=-GX OF 1,200 UG/L (RBC OF 100); AND CONCENTRATION IN SB-4 OF BENZENE 2.71 UG/L (RBC 0.35); AND NWT PH=-GX OF 1,370 UG/L (RBC OF 100)

Date Received: 9/14/2007
Release Type: Regulated
Facility ID: 838

RESPONSIBLE PARTY INFORMATION

First Name: Jeff
Last Name: Goold
Organization: Shell oil Products US
City: Houston
Phone: 425-844-2355
Address: PO BOX 4369
State: TX
Zip: 77210

INVOICE CONTACT INFORMATION

First Name: Jeff
Last Name: Goold
Organization: Shell oil Products US
City: Houston
Phone: 425-844-2355
Address: PO BOX 4369
State: TX
Zip: 77210

Confirmation: Lab:RP
Discovery: SiteAssessment
MEDIA TYPE
Ground Water
Soil

Cause: Unknown
CONTAMINANT TYPE
Diesel (Motor Fuel)
Unleaded Gasoline