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425.558.0134 800.477.7411
Fax 425.869.7494

January 5, 2005

Mr. John Wietfeld
Washington State Department of Ecology
Northwest Regional Office
Toxics Cleanup Program, UST Division
3190 160th Avenue SE
Bellevue, Washington 98008-5452

SUBJ: SHELL GRASP MONITORING REPORT ✓
Shell Service Station
21641 Maple Valley Highway
Maple Valley, Washington
Delta Project ST21-641-1.2004

Dear Mr. Wietfeld:

Delta Environmental Consultants, Inc. (Delta), on behalf of Equilon Enterprises LLC dba Shell Oil Products US (SHELL) has prepared this Shell GRASP Monitoring Report for the above referenced site.

GRASP (GROundwater ASsessment Program) is a voluntary initiative by SHELL to install groundwater monitoring wells at numerous retail service stations nationwide that do not have any active release cases but have been identified to be in close proximity to one or more public water supply wells. The purpose of this program is to proactively monitor the groundwater beneath these sites and, in the event of a subsurface release, to respond quickly to protect public wells from this impact.

If you have any questions regarding this site, please contact Mr. Brian Pletcher (Delta) at (503) 639-8098 or Mr. Tony Palagyi (SHELL) at (425) 377-8530.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

Tena Seeds
Tena Seeds, E.I.T.
Project Engineer

Ward Crell, R.G.
Senior Geologist



Attachments: Shell GRASP Monitoring Report

cc: Mr. Tony Palagyi, Shell Oil Products US, Seattle, Washington

Release # 3431
Texaco-Maple Valley
Maple Valley
UST # 3358
www.deltaenv.com

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SHELL GRASP MONITORING REPORT

Station Address: 21641 Maple Valley Highway
Maple Valley, Washington
SHELL GRASP Incident No.: 97420022
DELTA Project No.: ST21-641-1.2004
SHELL Environmental Engin./Phone No.: Tony Palagyi / (425) 377-8530
DELTA Project Manager/Phone No.: Brian Pletcher / (503) 639-8098

Current Phase of Project: GRASP Groundwater Monitoring
Frequency of Sampling: Semi-Annual
Frequency of Monitoring: Semi-Annual
Is Separate Phase Hydrocarbon Present On-site Yes No
(Well #'s):
Cumulative SPH Recovered to Date : None
SPH Recovered This Quarter : None
Sensitive Receptor(s) Information: Nearest production well is a municipal supply well, approximately 845 ft east of the site ✓
Approximate Depth to Groundwater: 11.97 to 13.29 feet ✓
Groundwater Gradient: WSW @ approximately 0.006 ft/ft ✓
Summary of Unusual Activity: None ✓

Brian Pletcher
Project Manager (Delta)

ATTACHED:

- Table 1 – Groundwater Gauging and Analytical Results
- Figure 1 – Site Location Map
- Figure 2 – Groundwater Elevation Contour Map
- Figure 3 – Hydrocarbon Distribution in Groundwater Map
- Appendix A – Field Data Sheets
- Appendix B – Field Procedures
- Appendix C – Laboratory Report and Chain-of-Custody Documents

TABLE

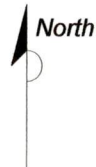
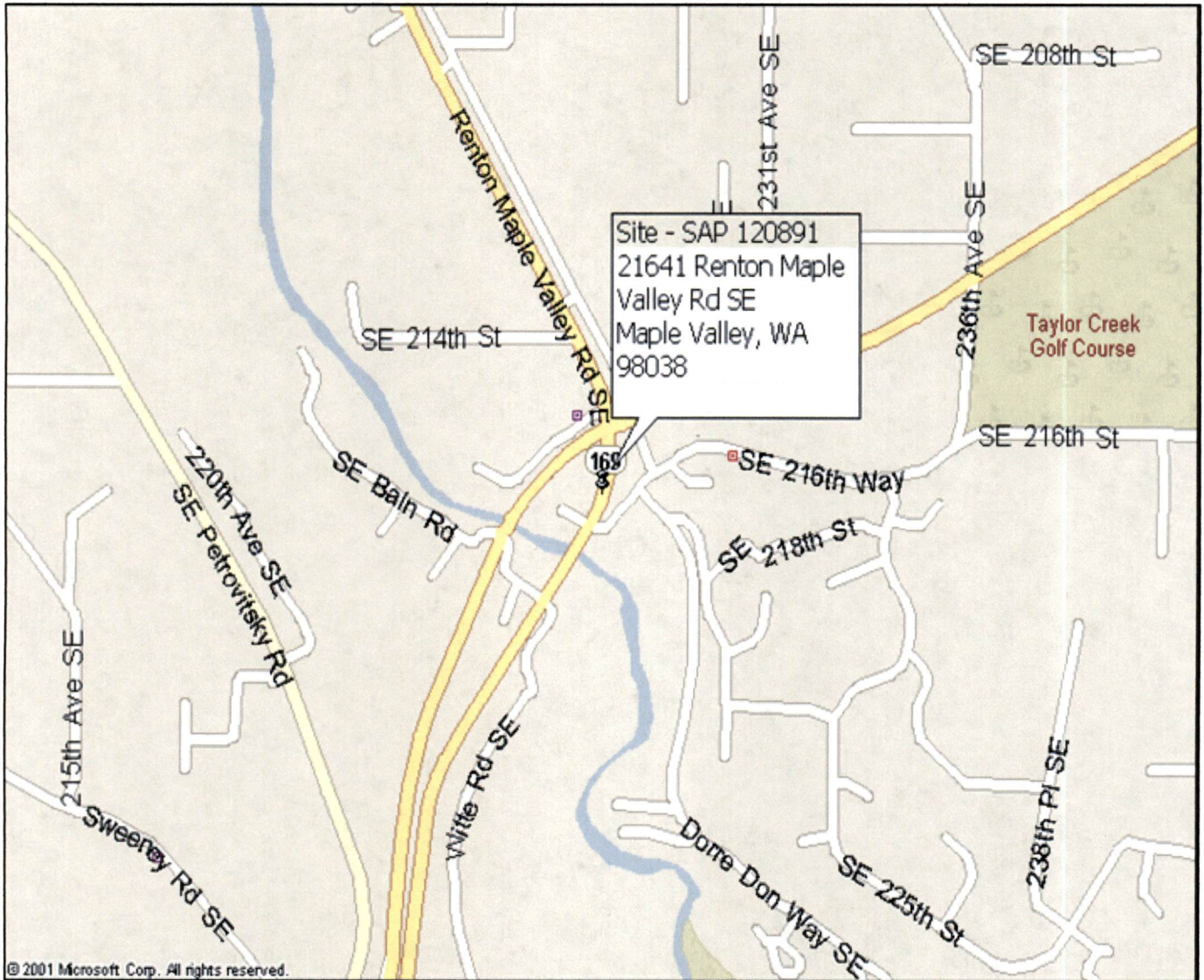
TABLE 1
GROUNDWATER GAUGING AND ANALYTICAL DATA
21641 Maple Valley Highway
Maple Valley, Washington

Sample I.D. TOC ¹	Sample Date	TPH-G (µg/l)	TPH-D (µg/l)	TPH-O (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (µg/l)	TBA (µg/l)	Ethanol (µg/l)	Depth to GW (feet)	SPH (feet)	GW Elev. ¹ (feet)
MW-1b	12/19/02	<250	<250	<750	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	NA	12.53	0.00	327.50
340.03	05/13/03	<250	<250	<500	<1	<1	<1	<1	<1	<5	<5	<5	<50	NA	12.47	0.00	327.56
	08/20/03	<250	<250	<500	<1	<1	<1	<1	<1	<5	<5	<5	<50	<5,000	13.10	0.00	326.93
	12/10/03	530	<250	<500	240	180	5.7	21.2	<1	<5	<5	<5	<50	<5,000	12.25	0.00	327.78
	01/08/04 ²	<1,000	NA	NA	<0.25	<0.5	<0.5	<1	NA	NA	NA	NA	NA	NA	12.35	0.00	327.68
	05/26/04	<250	<250	<500	<1	<1	<1	<1	<1	<5	<5	<5	<50	<5,000	12.75	0.00	327.28
	11/15/04	<250	<250	<500	<1	<1	<1	<1	<1	<5	<5	<5	<50	<5,000	12.95	0.00	327.08
MW-2b	12/19/02	<250	<250	<750	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	NA	11.57	0.00	327.85
339.42	05/13/03	<250	<250	<500	<1	<1	<1	<1	<1	<5	<5	<5	<50	NA	11.51	0.00	327.91
	08/20/03	<250	<250	<500	<1	<1	<1	<1	<1	<5	<5	<5	<50	<5,000	12.50	0.00	326.92
	12/10/03	<250	<250	<500	3.2	2.6	<1	<1	<1	<5	<5	<5	<50	<5,000	11.32	0.00	328.10
	01/08/04 ²	<1,000	NA	NA	<0.25	<0.5	<0.5	<1	NA	NA	NA	NA	NA	NA	11.41	0.00	328.01
	05/26/04	<250	<250	<500	<1	<1	<1	<1	<1	<5	<5	<5	<50	<5,000	11.78	0.00	327.64
	11/15/04	<250	<250	<500	<1	<1	<1	<1	<1	<5	<5	<5	<50	<5,000	11.97	0.00	327.45
MW-12	12/19/02	<250	<250	<750	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	NA	12.95	0.00	327.43
340.38	05/13/03	<250	<250	<500	<1	<1	<1	<1	<1	<5	<5	<5	<50	NA	12.90	0.00	327.48
	08/20/03	<250	<250	<500	<1	<1	<1	<1	<1	<5	<5	<5	<50	<5,000	13.21	0.00	327.17
	12/10/03	<250	<250	<500	32	24	<1	2.3	<1	<5	<5	<5	<50	<5,000	12.66	0.00	327.72
	01/08/04 ²	<1,000	NA	NA	0.326	2.14	<0.5	<1	NA	NA	NA	NA	NA	NA	12.83	0.00	327.55
	05/26/04	<250	<250	<500	<1	<1	<1	<1	<1	<5	<5	<5	<50	<5,000	13.10	0.00	327.28
	11/15/04	<250	<250	<500	<1	<1	<1	<1	<1	<5	<5	<5	<50	<5,000	13.29	0.00	327.09
MW-13	12/19/02	<250	<250	<750	<0.5	0.69	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	NA	12.70	0.00	327.49
340.19	05/13/03	<250	<250	<500	<1	<1	<1	<1	<1	<5	<5	<5	<50	NA	12.62	0.00	327.57
	08/20/03	<250	<250	<500	<1	<1	<1	<1	<1	<5	<5	<5	<50	<5,000	13.52	0.00	326.67
	12/10/03	<250	<250	<500	<1	<1	<1	<1	<1	<5	<5	<5	<50	<5,000	12.37	0.00	327.82
	01/08/04 ²	<1,000	NA	NA	<0.25	<0.5	<0.5	<1	NA	NA	NA	NA	NA	NA	12.54	0.00	327.65
	05/26/04	<250	<250	<500	<1	<1	<1	<1	<1	<5	<5	<5	<50	<5,000	12.83	0.00	327.36
	11/15/04	<250	<250	<500	<1	<1	<1	<1	<1	<5	<5	<5	<50	<5,000	13.01	0.00	327.18

TABLE 1
GROUNDWATER GAUGING AND ANALYTICAL DATA
 21641 Maple Valley Highway
 Maple Valley, Washington

Sample I.D.	Sample Date	TPH-G (µg/l)	TPH-D (µg/l)	TPH-O (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (µg/l)	TBA (µg/l)	Ethanol (µg/l)	Depth to GW (feet)	SPH (feet)	GW Elev. ¹ (feet)
MTCA Method A Cleanup Levels:		1000³	500	500	5	1000	700	1000	20	-	-	-	-	-	-	-	-
<p>Notes: µg/l = micrograms per liter TOC = Top of well casing elevation (feet) SPH = Separate-phase hydrocarbons TPH-G = Total Petroleum Hydrocarbons as Gasoline TPH-D = Total Petroleum Hydrocarbons as Diesel TPH-O = Total Petroleum Hydrocarbons as Oil MTBE = Methyl tert-butyl ether DIPE = Di-isopropyl ether ETBE = Ethyl tert-butyl ether TAME = tert-Amyl methyl ether TBA = t-Butyl Alcohol NA = Not analyzed <n = Below the detection limit TPH-D and TPH-O quantified using Northwest Method NWTPH-Dx TPH-G quantified using Northwest Method NWTPH-Gx BTEX Compounds, MTBE, DIPE, ETBE, TAME, and TBA analyzed using EPA Method 8260B ¹TOC elevation and groundwater elevation relative to Mean Sea Level ²Well was purged prior to groundwater sampling on January 8, 2004 ³MTCA Method A Cleanup Level for TPH-Gasoline is 800 µg/l if benzene is detectable in groundwater.</p>																	

FIGURES



NOT TO SCALE

FIGURE 1

SITE LOCATION MAP

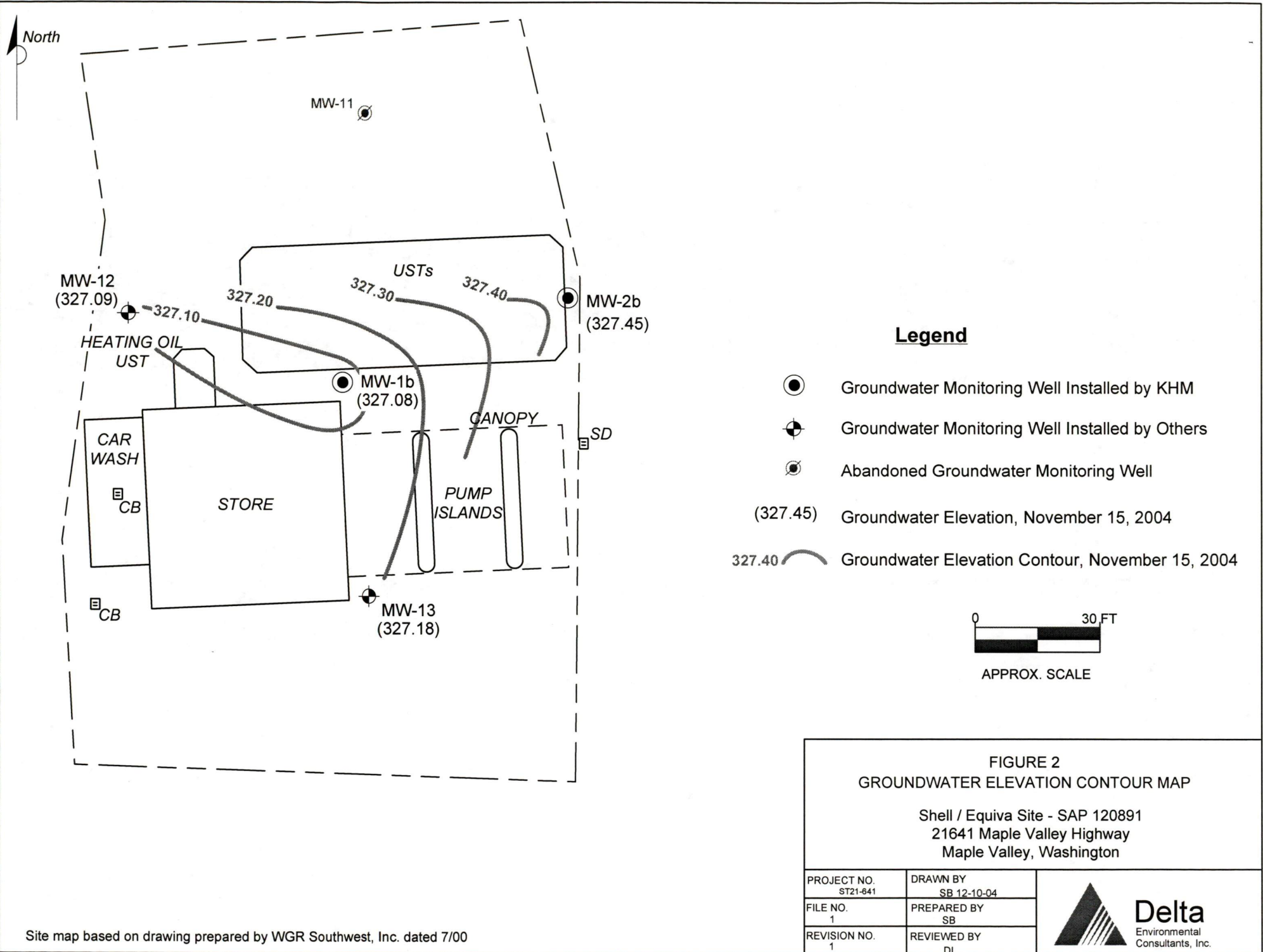
Shell / Equiva Site - SAP 120891
 21641 Maple Valley Highway
 Maple Valley, Washington

PROJECT NO. ST21-641	DRAWN BY SB 12-10-04
FILE NO. 1	PREPARED BY SB
REVISION NO. 1	REVIEWED BY DL



Delta
 Environmental
 Consultants, Inc.

GENERAL NOTES:
 BASE MAP FROM MICROSOFT STREETS & TRIPS 2003



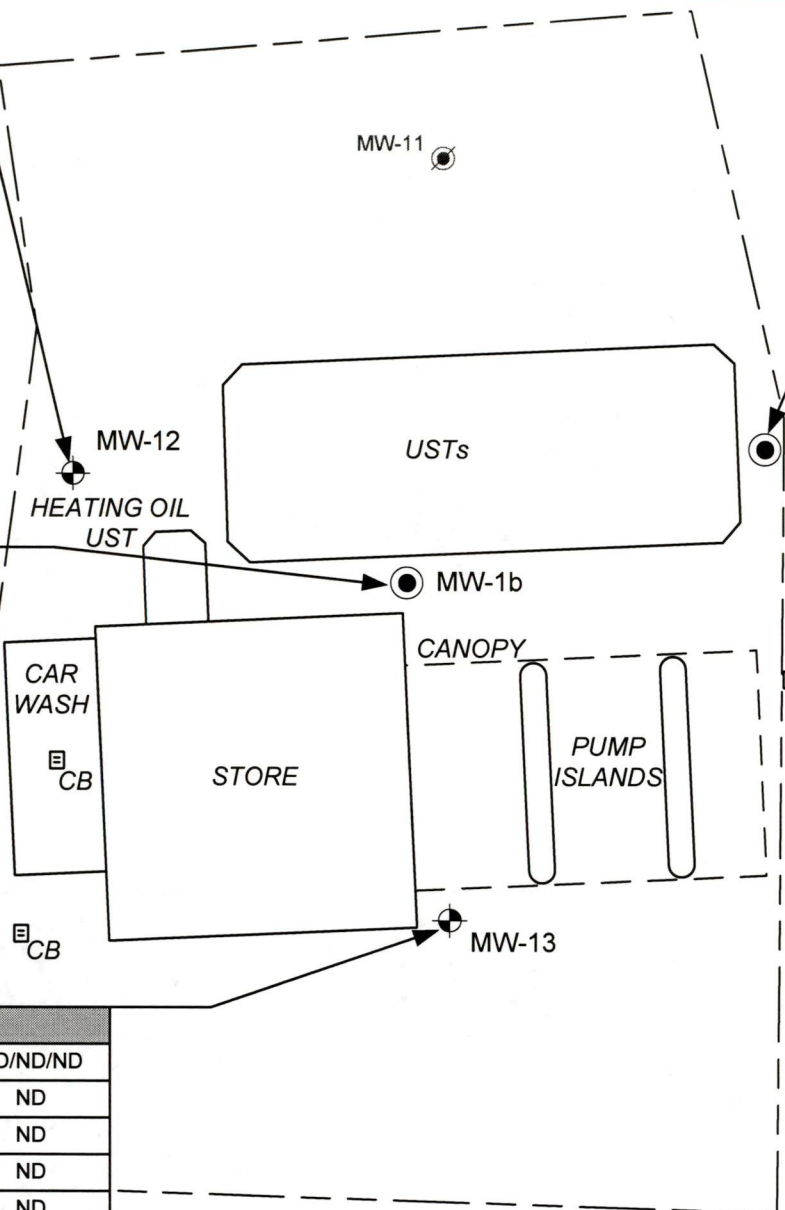
North

MW-12	
TPH-G/D/O	ND/ND/ND
B	ND
T	ND
E	ND
X	ND
MTBE	ND
TBA	ND

MW-2b	
TPH-G/D/O	ND/ND/ND
B	ND
T	ND
E	ND
X	ND
MTBE	ND
TBA	ND

MW-1b	
TPH-G/D/O	ND/ND/ND
B	ND
T	ND
E	ND
X	ND
MTBE	ND
TBA	ND

MW-13	
TPH-G/D/O	ND/ND/ND
B	ND
T	ND
E	ND
X	ND
MTBE	ND
TBA	ND



Legend

- Groundwater Monitoring Well Installed by KHM
- Groundwater Monitoring Well Installed by Others
- Abandoned Monitoring Well
- TPH-G/D/O Total Petroleum Hydrocarbons as Gasoline/Diesel/Oil
- B Benzene
- T Toluene
- E Ethylbenzene
- X Total Xylenes
- MTBE Methyl tert-Butyl Ether
- TBA Tert-Butyl Alcohol
- ND Not Detected

Note: All concentrations reported in micrograms per liter (ug/l).

FIGURE 3
HYDROCARBON DISTRIBUTION IN GROUNDWATER,
NOVEMBER 15, 2004

Shell / Equiva Site - SAP 120891
21641 Maple Valley Highway
Maple Valley, Washington



PROJECT NO. ST21-641	DRAWN BY SB 12-10-04
FILE NO. 1	PREPARED BY SB
REVISION NO. 1	REVIEWED BY DL



APPENDIX A

FIELD DATA SHEETS

APPENDIX B

FIELD PROCEDURES

GROUNDWATER MONITORING AND SAMPLING

Before the sampling event, Delta measured depth to water in each groundwater monitoring well at the facility with an electronic water level meter. This information was recorded on waterproof field sheets. Groundwater elevations (GWE) were measured to an accuracy of 0.01 feet. Samples were withdrawn from each well using a disposable polyethylene bailer and placed in the appropriate laboratory-provided container. Samples were labeled, placed into ice filled coolers, logged onto chain-of-custody forms and transported to the laboratory.

APPENDIX C

LABORATORY REPORT AND CHAIN-OF-CUSTODY DOCUMENTS



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

RECEIVED
DEC 06 2004
BY: _____

Shell Oil Products US

Certificate of Analysis Number:
04110724

Report To: Delta Environmental Consultants, Inc. Tena Seeds 17720 NE 65th Street Suite 201 Redmond WA 98052- ph: (800) 477-7411 fax:	Project Name: INC#97420022 Site: 21641 Maple Valley Highway Site Address: 21641 Maple Valley Highway Maple Valley WA PO Number: State: Washington State Cert. No.: C156 Date Reported: 11/30/2004
--	--

This Report Contains A Total Of 14 Pages

Excluding This Page, Chain Of Custody
And
Attachments

12/1/2004

Date



HOUSTON LABORATORY
 8880 INTERCHANGE DRIVE
 HOUSTON, TX 77054
 (713) 660-0901

Case Narrative for:
Shell Oil Products US

Certificate of Analysis Number:
04110724

<p>Report To:</p> <p>Delta Environmental Consultants, Inc. Tena Seeds 17720 NE 65th Street Suite 201 Redmond WA 98052- ph: (800) 477-7411 fax:</p>	<p>Project Name: INC#97420022</p> <p>Site: 21641 Maple Valley Highway</p> <p>Site Address: 21641 Maple Valley Highway Maple Valley WA</p> <p>PO Number:</p> <p>State: Washington</p> <p>State Cert. No.: C156</p> <p>Date Reported: 11/30/2004</p>
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See sample receipt checklist for nonconformance issues.

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report (" mg/kg-dry " or " ug/kg-dry ").

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

12/1/2004

Erica Rodgers
 Project Manager

Date



HOUSTON LABORATORY
 8880 INTERCHANGE DRIVE
 HOUSTON, TX 77054
 (713) 660-0901

Shell Oil Products US

Certificate of Analysis Number:

04110724

Report To: Delta Environmental Consultants, Inc.
 Tena Seeds
 17720 NE 65th Street
 Suite 201
 Redmond
 WA
 98052-
 ph: (800) 477-7411 fax: (425) 869-7494

Project Name: INC#97420022
Site: 21641 Maple Valley Highway
Site Address: 21641 Maple Valley Highway
 Maple Valley WA
PO Number:
State: Washington
State Cert. No.: C156
Date Reported: 11/30/2004

Fax To:

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
MW-1b	04110724-01	Water	11/15/2004 1:05:00 PM	11/17/2004 9:30:00 AM		<input type="checkbox"/>
MW-2b	04110724-02	Water	11/15/2004 12:40:00 PM	11/17/2004 9:30:00 AM		<input type="checkbox"/>
MW-12	04110724-03	Water	11/15/2004 1:30:00 PM	11/17/2004 9:30:00 AM		<input type="checkbox"/>
MW-13	04110724-04	Water	11/15/2004 2:00:00 PM	11/17/2004 9:30:00 AM		<input type="checkbox"/>

12/1/2004

Erica Rodgers
 Project Manager

Date

Joel Grice
 Laboratory Director

Ted Yen
 Quality Assurance Officer



HOUSTON LABORATORY
 8880 INTERCHANGE DRIVE
 HOUSTON, TX 77054
 (713) 660-0901

Client Sample ID MW-1b

Collected: 11/15/2004 13:05 SPL Sample ID: 04110724-01

Site: 21641 Maple Valley Highway

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS			MCL	NWTPH-DX	Units: mg/L		
Diesel Range Organics	ND	0.25	1		11/24/04 7:56	MAC	2549679
Motor Oil	ND	0.5	1		11/24/04 7:56	MAC	2549679
Surr: n-Pentacosane	64.6 %	20-131	1		11/24/04 7:56	MAC	2549679

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	11/20/2004 18:47	K_L	1.00

GASOLINE RANGE ORGANICS			MCL	NWTPH-GX	Units: mg/L		
Gasoline Range Organics	ND	0.25	1		11/23/04 17:45	DL	2544743
Surr: 1,4-Difluorobenzene	98.3 %	60-155	1		11/23/04 17:45	DL	2544743
Surr: 4-Bromofluorobenzene	85.3 %	50-158	1		11/23/04 17:45	DL	2544743

SEMIVOLATILE HYDROCARBONS - ALCOHOL			MCL	SW8015B	Units: mg/L		
Ethanol	ND	5	1		11/19/04 20:44	AE	2540451

VOLATILE ORGANICS BY METHOD 8260B			MCL	SW8260B	Units: ug/L		
Benzene	ND	1	1		11/27/04 4:01	FB	2547395
Diisopropyl Ether	ND	5	1		11/27/04 4:01	FB	2547395
Ethyl tert-butyl ether	ND	5	1		11/27/04 4:01	FB	2547395
Ethylbenzene	ND	1	1		11/27/04 4:01	FB	2547395
Methyl tert-butyl ether	ND	1	1		11/27/04 4:01	FB	2547395
t-Butyl Alcohol	ND	50	1		11/27/04 4:01	FB	2547395
tert-Amyl methyl ether	ND	5	1		11/27/04 4:01	FB	2547395
Toluene	ND	1	1		11/27/04 4:01	FB	2547395
m,p-Xylene	ND	1	1		11/27/04 4:01	FB	2547395
o-Xylene	ND	1	1		11/27/04 4:01	FB	2547395
Xylenes, Total	ND	1	1		11/27/04 4:01	FB	2547395
Surr: 1,2-Dichloroethane-d4	102 %	71-140	1		11/27/04 4:01	FB	2547395
Surr: 4-Bromofluorobenzene	99.8 %	70-130	1		11/27/04 4:01	FB	2547395
Surr: Toluene-d8	102 %	61-121	1		11/27/04 4:01	FB	2547395

Qualifiers: ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)
 B - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution
 * - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference
 J - Estimated Value between MDL and PQL



HOUSTON LABORATORY
 8880 INTERCHANGE DRIVE
 HOUSTON, TX 77054
 (713) 660-0901

Client Sample ID MW-2b Collected: 11/15/2004 12:40 SPL Sample ID: 04110724-02

Site: 21641 Maple Valley Highway

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS			MCL	NWTPH-DX	Units: mg/L		
Diesel Range Organics	ND	0.25	1		11/24/04 13:20	MAC	2549683
Motor Oil	ND	0.5	1		11/24/04 13:20	MAC	2549683
Surr: n-Pentacosane	64.0	% 20-131	1		11/24/04 13:20	MAC	2549683

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	11/20/2004 18:47	K_L	1.00

GASOLINE RANGE ORGANICS			MCL	NWTPH-GX	Units: mg/L		
Gasoline Range Organics	ND	0.25	1		11/23/04 18:11	DL	2544744
Surr: 1,4-Difluorobenzene	99.0	% 60-155	1		11/23/04 18:11	DL	2544744
Surr: 4-Bromofluorobenzene	83.0	% 50-158	1		11/23/04 18:11	DL	2544744

SEMIVOLATILE HYDROCARBONS - ALCOHOL			MCL	SW8015B	Units: mg/L		
Ethanol	ND	5	1		11/19/04 20:58	AE	2540452

VOLATILE ORGANICS BY METHOD 8260B			MCL	SW8260B	Units: ug/L		
Benzene	ND	1	1		11/27/04 4:24	FB	2547396
Diisopropyl Ether	ND	5	1		11/27/04 4:24	FB	2547396
Ethyl tert-butyl ether	ND	5	1		11/27/04 4:24	FB	2547396
Ethylbenzene	ND	1	1		11/27/04 4:24	FB	2547396
Methyl tert-butyl ether	ND	1	1		11/27/04 4:24	FB	2547396
t-Butyl Alcohol	ND	50	1		11/27/04 4:24	FB	2547396
tert-Amyl methyl ether	ND	5	1		11/27/04 4:24	FB	2547396
Toluene	ND	1	1		11/27/04 4:24	FB	2547396
m,p-Xylene	ND	1	1		11/27/04 4:24	FB	2547396
o-Xylene	ND	1	1		11/27/04 4:24	FB	2547396
Xylenes, Total	ND	1	1		11/27/04 4:24	FB	2547396
Surr: 1,2-Dichloroethane-d4	104	% 71-140	1		11/27/04 4:24	FB	2547396
Surr: 4-Bromofluorobenzene	99.2	% 70-130	1		11/27/04 4:24	FB	2547396
Surr: Toluene-d8	100	% 61-121	1		11/27/04 4:24	FB	2547396

Qualifiers: ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)
 B - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution
 * - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference
 J - Estimated Value between MDL and PQL



HOUSTON LABORATORY
 8880 INTERCHANGE DRIVE
 HOUSTON, TX 77054
 (713) 660-0901

Client Sample ID MW-12

Collected: 11/15/2004 13:30 SPL Sample ID: 04110724-03

Site: 21641 Maple Valley Highway

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS			MCL	NWTPH-DX	Units: mg/L		
Diesel Range Organics	ND	0.25	1		11/24/04 14:01	MAC	2549684
Motor Oil	ND	0.5	1		11/24/04 14:01	MAC	2549684
Surr: n-Pentacosane	70.6 %	20-131	1		11/24/04 14:01	MAC	2549684

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	11/20/2004 18:47	K_L	1.00

GASOLINE RANGE ORGANICS			MCL	NWTPH-GX	Units: mg/L		
Gasoline Range Organics	ND	0.25	1		11/23/04 18:38	DL	2544745
Surr: 1,4-Difluorobenzene	99.3 %	60-155	1		11/23/04 18:38	DL	2544745
Surr: 4-Bromofluorobenzene	86.7 %	50-158	1		11/23/04 18:38	DL	2544745

SEMIVOLATILE HYDROCARBONS - ALCOHOL			MCL	SW8015B	Units: mg/L		
Ethanol	ND	5	1		11/19/04 21:12	AE	2540453

VOLATILE ORGANICS BY METHOD 8260B			MCL	SW8260B	Units: ug/L		
Benzene	ND	1	1		11/27/04 4:46	FB	2547397
Diisopropyl Ether	ND	5	1		11/27/04 4:46	FB	2547397
Ethyl tert-butyl ether	ND	5	1		11/27/04 4:46	FB	2547397
Ethylbenzene	ND	1	1		11/27/04 4:46	FB	2547397
Methyl tert-butyl ether	ND	1	1		11/27/04 4:46	FB	2547397
t-Butyl Alcohol	ND	50	1		11/27/04 4:46	FB	2547397
tert-Amyl methyl ether	ND	5	1		11/27/04 4:46	FB	2547397
Toluene	ND	1	1		11/27/04 4:46	FB	2547397
m,p-Xylene	ND	1	1		11/27/04 4:46	FB	2547397
o-Xylene	ND	1	1		11/27/04 4:46	FB	2547397
Xylenes, Total	ND	1	1		11/27/04 4:46	FB	2547397
Surr: 1,2-Dichloroethane-d4	104 %	71-140	1		11/27/04 4:46	FB	2547397
Surr: 4-Bromofluorobenzene	98.7 %	70-130	1		11/27/04 4:46	FB	2547397
Surr: Toluene-d8	100 %	61-121	1		11/27/04 4:46	FB	2547397

Qualifiers: ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)
 B - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution
 * - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference
 J - Estimated Value between MDL and PQL



HOUSTON LABORATORY
 8880 INTERCHANGE DRIVE
 HOUSTON, TX 77054
 (713) 660-0901

Client Sample ID MW-13 Collected: 11/15/2004 14:00 SPL Sample ID: 04110724-04

Site: 21641 Maple Valley Highway

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS			MCL	NWTPH-DX	Units: mg/L		
Diesel Range Organics	ND	0.25	1		11/24/04 14:41	MAC	2549685
Motor Oil	ND	0.5	1		11/24/04 14:41	MAC	2549685
Surr: n-Pentacosane	65.8	% 20-131	1		11/24/04 14:41	MAC	2549685

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	11/20/2004 18:47	K_L	1.00

GASOLINE RANGE ORGANICS			MCL	NWTPH-GX	Units: mg/L		
Gasoline Range Organics	ND	0.25	1		11/23/04 19:04	DL	2544746
Surr: 1,4-Difluorobenzene	96.7	% 60-155	1		11/23/04 19:04	DL	2544746
Surr: 4-Bromofluorobenzene	83.0	% 50-158	1		11/23/04 19:04	DL	2544746

SEMIVOLATILE HYDROCARBONS - ALCOHOL			MCL	SW8015B	Units: mg/L		
Ethanol	ND	5	1		11/19/04 21:26	AE	2540454

VOLATILE ORGANICS BY METHOD 8260B			MCL	SW8260B	Units: ug/L		
Benzene	ND	1	1		11/27/04 5:12	FB	2547399
Diisopropyl Ether	ND	5	1		11/27/04 5:12	FB	2547399
Ethyl tert-butyl ether	ND	5	1		11/27/04 5:12	FB	2547399
Ethylbenzene	ND	1	1		11/27/04 5:12	FB	2547399
Methyl tert-butyl ether	ND	1	1		11/27/04 5:12	FB	2547399
t-Butyl Alcohol	ND	50	1		11/27/04 5:12	FB	2547399
tert-Amyl methyl ether	ND	5	1		11/27/04 5:12	FB	2547399
Toluene	ND	1	1		11/27/04 5:12	FB	2547399
m,p-Xylene	ND	1	1		11/27/04 5:12	FB	2547399
o-Xylene	ND	1	1		11/27/04 5:12	FB	2547399
Xylenes, Total	ND	1	1		11/27/04 5:12	FB	2547399
Surr: 1,2-Dichloroethane-d4	102	% 71-140	1		11/27/04 5:12	FB	2547399
Surr: 4-Bromofluorobenzene	97.3	% 70-130	1		11/27/04 5:12	FB	2547399
Surr: Toluene-d8	102	% 61-121	1		11/27/04 5:12	FB	2547399

Qualifiers: ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)
 B - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution
 * - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference
 J - Estimated Value between MDL and PQL

Quality Control Documentation



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Shell Oil Products US

INC#97420022

Analysis: Diesel Range Organics
Method: NWTPH-Dx

WorkOrder: 04110724
Lab Batch ID: 43383

Method Blank

Samples in Analytical Batch:

RunID: HP_V_041124D-2549677 Units: mg/L
Analysis Date: 11/24/2004 6:35 Analyst: MAC
Preparation Date: 11/20/2004 18:47 Prep By: K_L Method SW3510C

Lab Sample ID Client Sample ID
04110724-01A MW-1b
04110724-02A MW-2b
04110724-03A MW-12
04110724-04A MW-13

Table with 3 columns: Analyte, Result, Rep Limit. Rows include Diesel Range Organics, Motor Oil, and Surr: n-Pentacosane.

Laboratory Control Sample (LCS)

RunID: HP_V_041124D-2549678 Units: mg/L
Analysis Date: 11/24/2004 7:15 Analyst: MAC
Preparation Date: 11/20/2004 18:47 Prep By: K_L Method SW3510C

Table with 6 columns: Analyte, Spike Added, Result, Percent Recovery, Lower Limit, Upper Limit. Row for Diesel Range Organics.

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 04110724-01
RunID: HP_V_041124D-2549680 Units: mg/L
Analysis Date: 11/24/2004 8:36 Analyst: MAC
Preparation Date: 11/20/2004 18:47 Prep By: K_L Method SW3510C

Table with 12 columns: Analyte, Sample Result, MS Spike Added, MS Result, MS % Recovery, MSD Spike Added, MSD Result, MSD % Recovery, RPD, RPD Limit, Low Limit, High Limit. Row for Diesel Range Organics.

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Shell Oil Products US
INC#97420022

Analysis: Semivolatile Hydrocarbons - Alcohol
Method: SW8015B

WorkOrder: 04110724
Lab Batch ID: R127678

Method Blank

Samples in Analytical Batch:

RunID: HP_Q_041119A-2540435 Units: mg/L
Analysis Date: 11/19/2004 16:24 Analyst: AE

Lab Sample ID Client Sample ID
04110724-01D MW-1b
04110724-02D MW-2b
04110724-03D MW-12
04110724-04D MW-13

Table with 3 columns: Analyte, Result, Rep Limit. Row: Ethanol, ND, 5.0

Laboratory Control Sample (LCS)

RunID: HP_Q_041119A-2540434 Units: mg/L
Analysis Date: 11/19/2004 15:56 Analyst: AE

Table with 6 columns: Analyte, Spike Added, Result, Percent Recovery, Lower Limit, Upper Limit. Row: Ethanol, 200, 189, 94.5, 49, 146

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 04110573-03
RunID: HP_Q_041119A-2540456 Units: mg/L
Analysis Date: 11/19/2004 21:54 Analyst: AE

Table with 12 columns: Analyte, Sample Result, MS Spike Added, MS Result, MS % Recovery, MSD Spike Added, MSD Result, MSD % Recovery, RPD, RPD Limit, Low Limit, High Limit. Row: Ethanol, ND, 200, 190, 94.9, 200, 186, 93.2, 1.86, 20, 57, 136

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Shell Oil Products US
INC#97420022

Analysis: Gasoline Range Organics
Method: NWTPH-Gx

WorkOrder: 04110724
Lab Batch ID: R127901

Method Blank

Samples in Analytical Batch:

RunID: HP_S_041123A-2544733 Units: mg/L
Analysis Date: 11/23/2004 12:33 Analyst: DL

Lab Sample ID Client Sample ID
04110724-01B MW-1b
04110724-02B MW-2b
04110724-03B MW-12
04110724-04B MW-13

Table with 3 columns: Analyte, Result, Rep Limit. Rows include Gasoline Range Organics, Surr: 1,4-Difluorobenzene, and Surr: 4-Bromofluorobenzene.

Laboratory Control Sample (LCS)

RunID: HP_S_041123A-2544732 Units: mg/L
Analysis Date: 11/23/2004 12:06 Analyst: DL

Table with 6 columns: Analyte, Spike Added, Result, Percent Recovery, Lower Limit, Upper Limit. Row for Gasoline Range Organics.

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 04110679-02
RunID: HP_S_041123A-2544740 Units: mg/L
Analysis Date: 11/23/2004 16:28 Analyst: DL

Table with 12 columns: Analyte, Sample Result, MS Spike Added, MS Result, MS % Recovery, MSD Spike Added, MSD Result, MSD % Recovery, RPD, RPD Limit, Low Limit, High Limit. Row for Gasoline Range Organics.

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Shell Oil Products US

INC#97420022

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 04110724
Lab Batch ID: R128029

Method Blank

Samples in Analytical Batch:

RunID: MSDVOA1_041127A-2547 Units: ug/L
Analysis Date: 11/27/2004 2:08 Analyst: FB

Lab Sample ID Client Sample ID
04110724-01C MW-1b
04110724-02C MW-2b
04110724-03C MW-12
04110724-04C MW-13

Table with 3 columns: Analyte, Result, Rep Limit. Rows include Benzene, Diisopropyl Ether, Ethyl tert-butyl ether, Ethylbenzene, Methyl tert-butyl ether, t-Butyl Alcohol, tert-Amyl methyl ether, Toluene, m,p-Xylene, o-Xylene, Xylenes, Total, and Surr: 1,2-Dichloroethane-d4, Surr: 4-Bromofluorobenzene, Surr: Toluene-d8.

Laboratory Control Sample (LCS)

RunID: MSDVOA1_041127A-2547 Units: ug/L
Analysis Date: 11/27/2004 2:31 Analyst: FB

Table with 6 columns: Analyte, Spike Added, Result, Percent Recovery, Lower Limit, Upper Limit. Rows include Benzene, Diisopropyl Ether, Ethyl tert-butyl ether, Ethylbenzene, Methyl tert-butyl ether, t-Butyl Alcohol, tert-Amyl methyl ether, Toluene, m,p-Xylene, o-Xylene, Xylenes, Total.

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Shell Oil Products US

INC#97420022

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 04110724
Lab Batch ID: R128029

Sample Spiked: 04110733-11
RunID: MSDVOA1_041127A-2547 Units: ug/L
Analysis Date: 11/27/2004 2:54 Analyst: FB

Table with 12 columns: Analyte, Sample Result, MS Spike Added, MS Result, MS % Recovery, MSD Spike Added, MSD Result, MSD % Recovery, RPD, RPD Limit, Low Limit, High Limit. Rows include Benzene, Diisopropyl Ether, Ethyl tert-butyl ether, Ethylbenzene, Methyl tert-butyl ether, t-Butyl Alcohol, tert-Amyl methyl ether, Toluene, m,p-Xylene, o-Xylene, and Xylenes, Total.

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

*Sample Receipt Checklist
And
Chain of Custody*



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Sample Receipt Checklist

Workorder:	04110724	Received By:	NW
Date and Time Received:	11/17/2004 9:30:00 AM	Carrier name:	Fedex-Standard Overnight
Temperature:	5.0°C	Chilled by:	Water Ice

- 1. Shipping container/cooler in good condition? Yes No Not Present
- 2. Custody seals intact on shipping container/cooler? Yes No Not Present
- 3. Custody seals intact on sample bottles? Yes No Not Present
- 4. Chain of custody present? Yes No
- 5. Chain of custody signed when relinquished and received? Yes No
- 6. Chain of custody agrees with sample labels? Yes No
- 7. Samples in proper container/bottle? Yes No
- 8. Sample containers intact? Yes No
One each of the three vials for GRO analysis was received broken for MW-12 & MW-13.
- 9. Sufficient sample volume for indicated test? Yes No
- 10. All samples received within holding time? Yes No
- 11. Container/Temp Blank temperature in compliance? Yes No
- 12. Water - VOA vials have zero headspace? Yes No Not Applicable
- 13. Water - pH acceptable upon receipt? Yes No Not Applicable

SPL Representative:

Contact Date & Time:

Client Name Contacted:

Non Conformance Issues:

Client Instructions:

Shell Services LLC Chain Of Custody Record

04110724

8880 Interchange

Houston, TX 77054

713-660-0901

800-969-6775

Shell Project Manager to be invoiced:

- SCIENCE & ENGINEERING
- TECHNICAL SERVICES
- CRMT-HOUSTON

Anthony Palagizi

INCIDENT NUMBER (S&E ONLY)

9 7 4 2 0 0 2 2

SAP or CRMT NUMBER (TS/CRMT)

1 2 0 8 9 1

DATE: 11-15-04

PAGE: 1 of 1

CONSULTANT COMPANY:
Delta Environmental Consultants
 ADDRESS:
17720 NE 65th St, Ste 201
 CITY:
Redmond, WA 98052
 TELEPHONE: 425-558-0134 FAX: 425-869-7494 E-MAIL: tseeds@deltaenv.com

SITE ADDRESS (Street and City):
21641 ~~Repp~~ Maple Valley Hwy, Maple Valley, WA
 PROJECT CONTACT (Report to):
Tena Seeds
 CONSULTANT PROJECT NO.:
ST21-641-G
 SAMPLER NAME(S) (Print):
[Blank]

TURNAROUND TIME (BUSINESS DAYS):
 10 DAYS 5 DAYS 72 HOURS 48 HOURS 24 HOURS LESS THAN 24 HOURS

LA - RWQCB REPORT FORMAT UST AGENCY: _____
 GC/MS MTBE CONFIRMATION: HIGHEST _____ HIGHEST per BORING _____ ALL _____

SPECIAL INSTRUCTIONS OR NOTES: TEMPERATURE ON RECEIPT C° 5.0

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	DRO-NW X	GRD-NW X	BTEX / MTBE (8021B)	BTEX / MTBE + Oxygenates (8260B)	VOCs Full List + Oxygenates (8260B)	MTBE (8260B) Confirmation, See Not	Ethanol
	MW-1b	11-15-04	1305	W	9	X	X	X			X	
	MW-2b		1240			X	X	X			X	
	MW-12		1330	W	9	X	X	X			X	
	MW-13	11-15-04	1400	W	9	X	X	X			X	

FIELD NOTES:
 Container/Preservative or PID Readings or Laboratory Notes

HCl jUnpres.

Relinquished by: (Signature) Wan Starr 11-16-04

Received by: (Signature) [Signature]

Date: 11/17/04 Time: 0930