

Alt Name Texaco Station Maple Valley
Maple Valley

January 8, 2007

Ms. Carol Campagna
Shell Oil Products US
20945 S. Wilmington Avenue
Carson, California 90810-1039

Sent via Regular Mail

Shell UST ID 3358

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

Not VCP, RCU



Dear Ms. Campagna:

Delta Environmental Consultants, Inc. (Delta), 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.

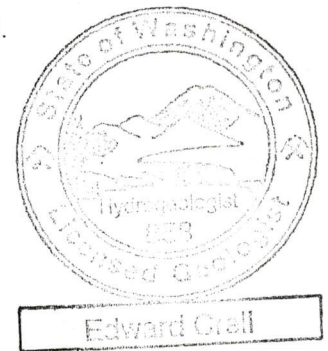
If you have any questions regarding this site, please contact Mr. Jeff Schatz (Delta) at (503) 639-8098

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

Jamey Peterson
Jamey Peterson
Staff Scientist

Ward Crell
Ward Crell, R.G.
Senior Geologist



Attachments: Shell GRASP Monitoring Report

cc: John Wietfield, Department of Ecology, 3190 160th Avenue SE Bellevue, WA 98008

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January 8, 2007

SHELL GRASP MONITORING REPORT

Station Address: 21641 Maple Valley Highway
Maple Valley, Washington
SHELL GRASP Incident No.: 97420022
DELTA Project No.: ST21-641-G
SHELL Environmental Engin./Phone No.: Carol Campagna / (707) 399-7878
DELTA Project Manager/Phone No.: Jeff Schatz / (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: 11.78 to 13.11 feet
Groundwater Gradient: WSW @ approximately 0.008 ft/ft
Summary of Unusual Activity: None

Jeff Schatz
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

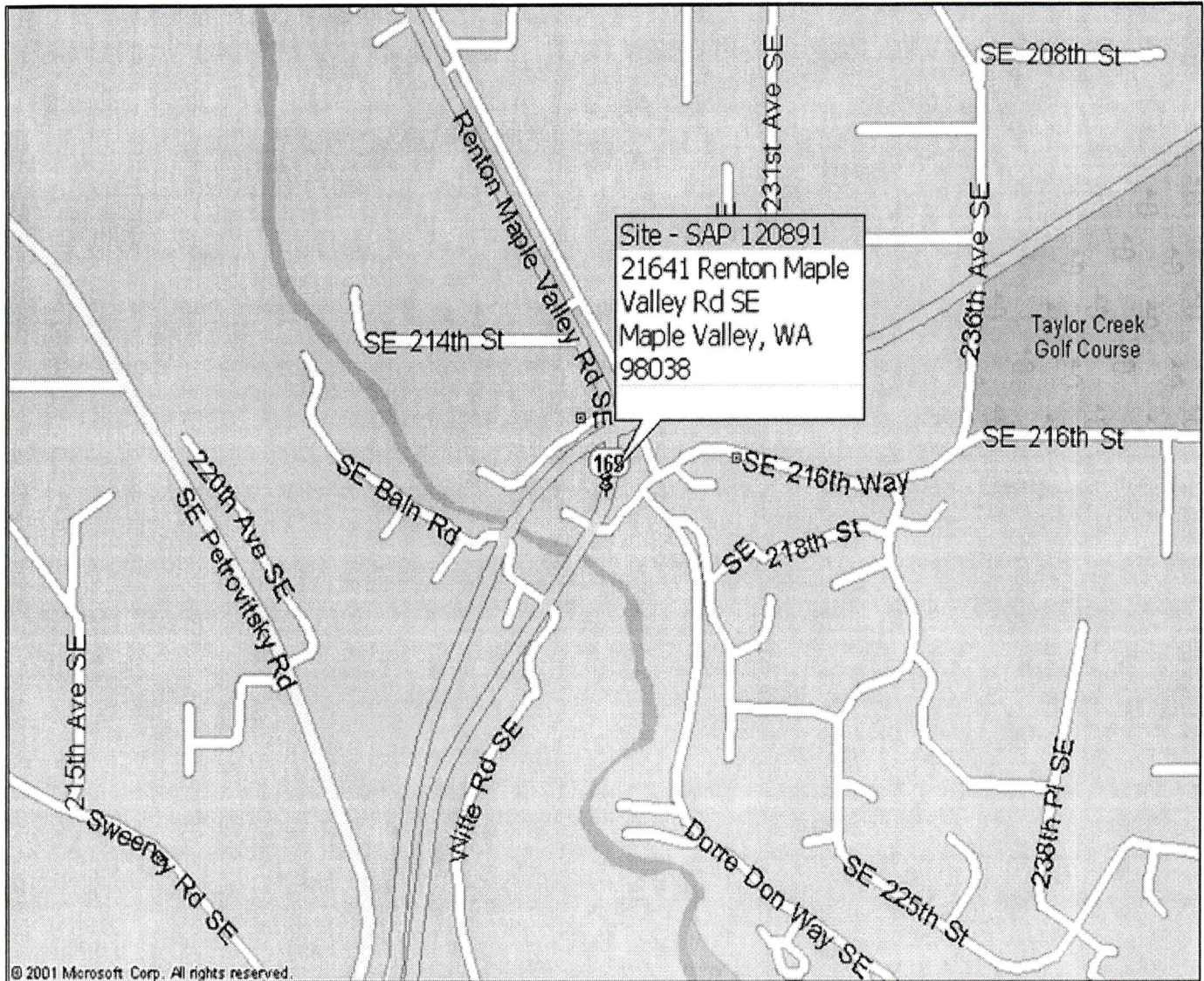
Sample I.D. TOC ¹	Sample Date	TPH-G (µg/l)	TPH-D (µg/l)	TPH-O (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (µg/l)	TBA (µg/l)	Ethanol (µg/l)	Depth to GW (feet)	SPH (feet)	GW Elev. ¹ (feet)
MW-1b	12/19/02	<250	<250	<750	<0.5	<0.5	<0.5	<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	<100	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
	05/24/05	<50	<250	<500	<1	<1	<1	<1	<1	<2	<2	<5	<50	<5,000	12.44	0.00	327.59
	10/26/05	<50	<250	<500	<1	<1	<1	<1	<1	<2	<2	<5	<50	<5,000	13.10	0.00	326.93
	04/26/06	<50.0	<236	<472	<0.500	<0.500	<0.500	<3.00	<5.00	<1.00	<1.00	<1.00	<50.0	<150	12.39	0.00	327.64
	10/26/06	<50.0	<96.2	<96.2	<0.500	<0.500	<0.500	<3.00	<5.00	<1.00	<1.00	<1.00	<50.0	<250	12.80	0.00	327.23
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	<100	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
	05/24/05	<50	<250	<500	<1	<1	<1	<1	<1	<2	<2	<5	<50	<5,000	12.41	0.00	327.01
	10/26/05	<50	<250	<500	<1	<1	<1	<1	<1	<2	<2	<5	<50	<5,000	12.04	0.00	327.38
	04/26/06	<50.0	<236	<472	<0.500	<0.500	<0.500	<3.00	<5.00	<1.00	<1.00	<1.00	<50.0	<150	11.34	0.00	328.08
	10/26/06	<50.0	<97.1	<97.1	<0.500	<0.500	<0.500	<3.00	<5.00	<1.00	<1.00	<1.00	<50.0	<250	11.78	0.00	327.64
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	<100	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
	05/24/05	<50	<250	<500	<1	<1	<1	<1	<1	<2	<2	<5	<50	<5,000	12.80	0.00	327.58
	10/26/05	<50	<250	<500	<1	<1	<1	<1	<1	<2	<2	<5	<50	<5,000	13.41	0.00	326.97
	04/26/06	<50.0	<245	<490	<0.500	<0.500	<0.500	<3.00	<5.00	<1.00	<1.00	<1.00	<50.0	<150	12.75	0.00	327.63
	10/26/06	<50.0	<96.2	138	<0.500	<0.500	<0.500	<3.00	<5.00	<1.00	<1.00	<1.00	<50.0	<250	13.11	0.00	327.27

**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)
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	<100	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
	05/24/05	<50	<250	<500	<1	<1	<1	<1	<1	<2	<2	<5	<50	<5,000	12.51	0.00	327.68
	10/26/05	<50	<250	<500	<1	<1	<1	<1	<1	<2	<2	<5	<50	<5,000	13.28	0.00	326.91
	04/26/06	<50.0	<245	<490	<0.500	<0.500	<0.500	<3.00	<5.00	<1.00	<1.00	<1.00	<50.0	<150	12.44	0.00	327.75
	10/26/06	<50.0	<96.2	129	<0.500	<0.500	<0.500	<3.00	<5.00	<1.00	<1.00	<1.00	<50.0	<250	12.89	0.00	327.30
MTCA Method A Cleanup Levels:		1000³	500	500	5	1000	700	1000	20	-	-	-	-	-	-	-	-
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																	
¹ TOC elevation and groundwater elevation relative to Mean Sea Level																	
² Well was purged prior to groundwater sampling on January 8, 2004																	
³ MTCA Method A Cleanup Level for TPH-Gasoline is 800 µg/l if benzene is detectable in groundwater.																	

FIGURES



NOT TO SCALE

FIGURE 1

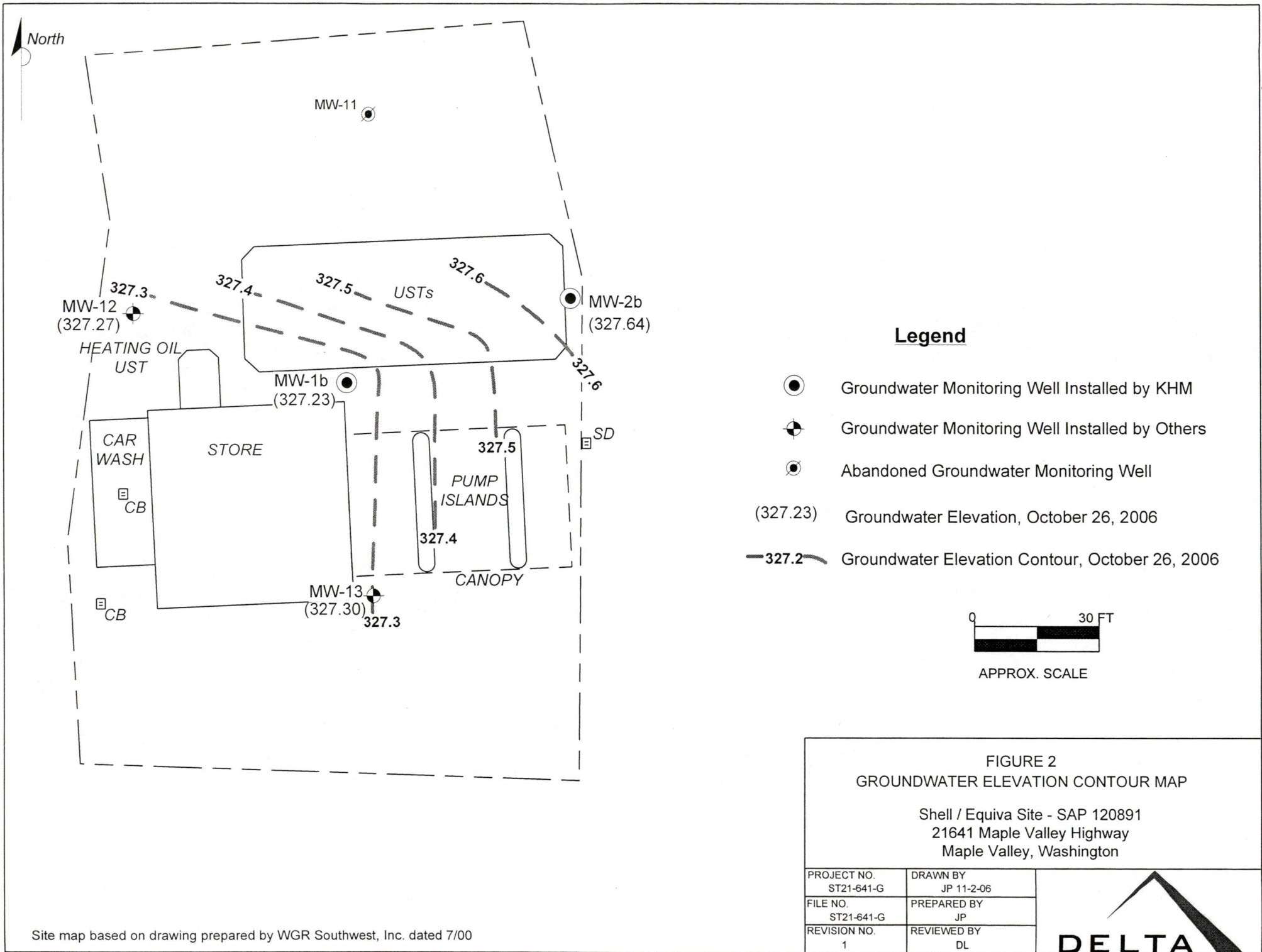
SITE LOCATION MAP

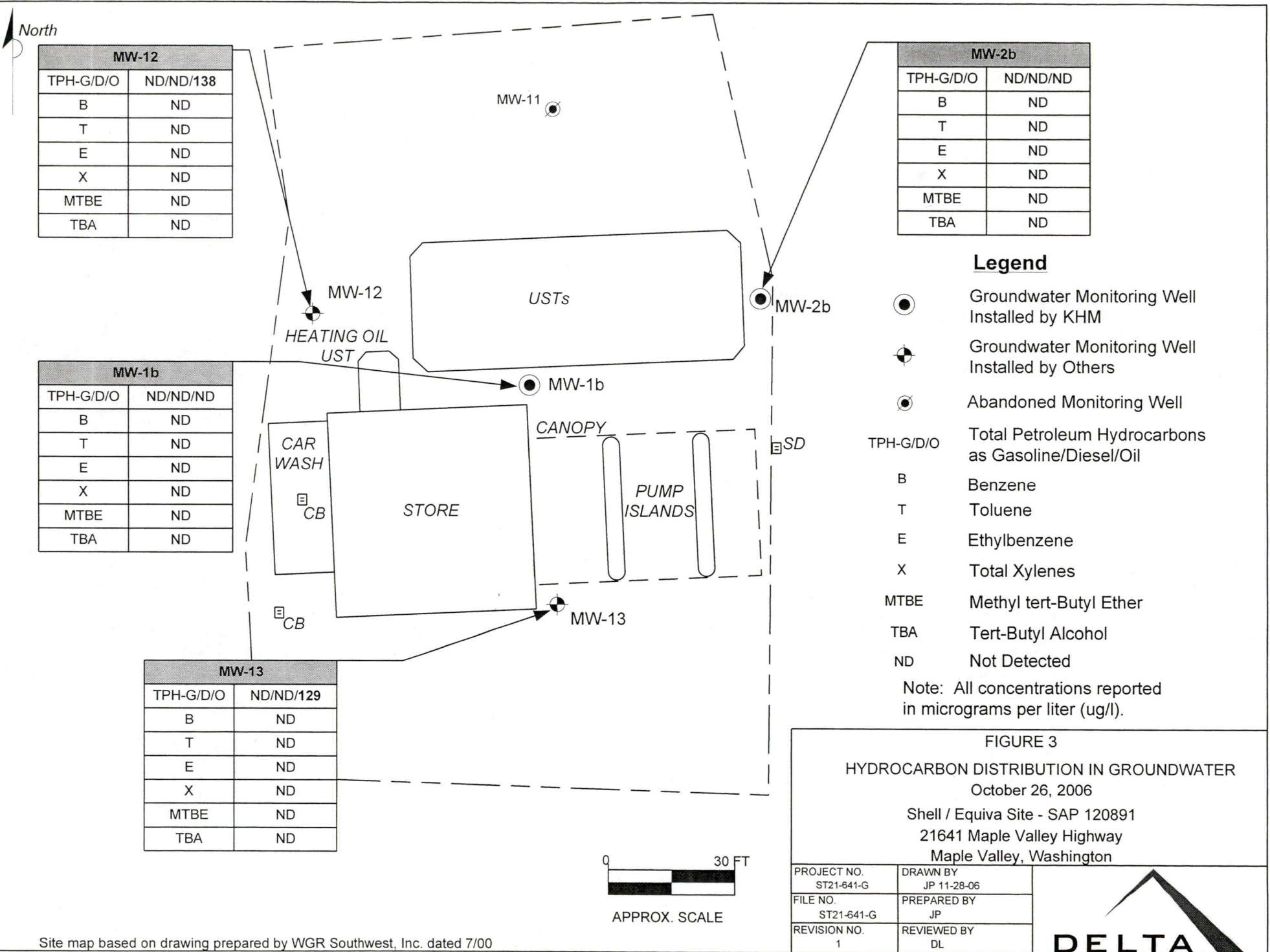
Shell / Equiva Site - SAP 120891
 21641 Maple Valley Highway
 Maple Valley, Washington

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



GENERAL NOTES:
 BASE MAP FROM MICROSOFT STREETS & TRIPS 2003





MW-12	
TPH-G/D/O	ND/ND/138
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/129
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

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
 October 26, 2006
 Shell / Equiva Site - SAP 120891
 21641 Maple Valley Highway
 Maple Valley, Washington

PROJECT NO. ST21-641-G	DRAWN BY JP 11-28-06
FILE NO. ST21-641-G	PREPARED BY JP
REVISION NO. 1	REVIEWED BY DL



Site map based on drawing prepared by WGR Southwest, Inc. dated 7/00

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**

November 27, 2006

Dawna Leong
Delta Environmental
4006 148th Ave NE
Redmond, WA/USA 98052

RE: Shell-21641 Maple Valley HWY; Maple Valley, WA

Enclosed are the results of analyses for samples received by the laboratory on 10/27/06 16:55.
The following list is a summary of the Work Orders contained in this report, generated on 11/27/06
15:05.

If you have any questions concerning this report, please feel free to contact me.

<u>Work Order</u>	<u>Project</u>	<u>ProjectNumber</u>
BPJ0636	Shell-21641 Maple Valley HW	97420022

TestAmerica - Seattle, WA

*The results in this report apply to the samples analyzed in accordance with the chain
of custody document. This analytical report shall not be reproduced except in full,
without the written approval of the laboratory.*

Sandra Yakamovich

Sandra Yakamovich, Project Manager



Delta Environmental
4006 148th Ave NE
Redmond, WA/USA 98052

Project Name: **Shell-21641 Maple Valley HWY; Maple Valley, WA**
Project Number: 97420022
Project Manager: Dawna Leong

Report Created:
11/27/06 15:05

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1B	BPJ0636-01	Water	10/27/06 14:10	10/27/06 16:55
MW-2B	BPJ0636-02	Water	10/27/06 13:40	10/27/06 16:55
MW-12	BPJ0636-03	Water	10/27/06 14:40	10/27/06 16:55
MW-13	BPJ0636-04	Water	10/27/06 14:20	10/27/06 16:55
TRIP BLANK	BPJ0636-05	Water	10/27/06 16:55	10/27/06 16:55

Sandra Yakamavich

Sandra Yakamavich, Project Manager



Delta Environmental 4006 148th Ave NE Redmond, WA/USA 98052	Project Name: Shell-21641 Maple Valley HWY; Maple Valley, WA Project Number: 97420022 Project Manager: Dawna Leong	Report Created: 11/27/06 15:05
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Volatile Petroleum Products by NWTPH-Gx
TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BPJ0636-01 (MW-1B)		Water			Sampled: 10/27/06 14:10					
Gasoline Range Hydrocarbons	NWTPH-Gx	ND	----	50.0	ug/l	1x	6K01018	11/01/06 10:05	11/01/06 21:34	
<i>Surrogate(s): 4-BFB (FID)</i>			83.7%		58 - 144 %	"				"
BPJ0636-02 (MW-2B)		Water			Sampled: 10/27/06 13:40					
Gasoline Range Hydrocarbons	NWTPH-Gx	ND	----	50.0	ug/l	1x	6K01018	11/01/06 10:05	11/01/06 22:03	
<i>Surrogate(s): 4-BFB (FID)</i>			84.3%		58 - 144 %	"				"
BPJ0636-03 (MW-12)		Water			Sampled: 10/27/06 14:40					
Gasoline Range Hydrocarbons	NWTPH-Gx	ND	----	50.0	ug/l	1x	6K01018	11/01/06 10:05	11/01/06 22:33	
<i>Surrogate(s): 4-BFB (FID)</i>			83.0%		58 - 144 %	"				"
BPJ0636-04 (MW-13)		Water			Sampled: 10/27/06 14:20					
Gasoline Range Hydrocarbons	NWTPH-Gx	ND	----	50.0	ug/l	1x	6K01018	11/01/06 10:05	11/01/06 23:03	
<i>Surrogate(s): 4-BFB (FID)</i>			85.5%		58 - 144 %	"				"

TestAmerica - Seattle, WA

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Sandra Yakamovich

Sandra Yakamovich, Project Manager



Delta Environmental 4006 148th Ave NE Redmond, WA/USA 98052	Project Name: Shell-21641 Maple Valley HWY; Maple Valley, WA Project Number: 97420022 Project Manager: Dawna Leong	Report Created: 11/27/06 15:05
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Oxygenates by EPA Method 8260B
TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BPJ0636-01 (MW-1B)		Water		Sampled: 10/27/06 14:10						
tert-Amyl Methyl Ether	EPA 8260B	ND	----	1.00	ug/l	1x	6J31037	10/31/06 14:25	11/01/06 03:55	
Benzene	"	ND	----	0.500	"	"	"	"	"	
tert-Butyl Alcohol	"	ND	----	50.0	"	"	"	"	"	
1,2-Dibromoethane (EDB)	"	ND	----	0.500	"	"	"	"	"	
1,2-Dichloroethane (EDC)	"	ND	----	0.500	"	"	"	"	"	
Diisopropyl ether	"	ND	----	1.00	"	"	"	"	"	
Ethyl tert-butyl ether	"	ND	----	1.00	"	"	"	"	"	
Ethanol	"	ND	----	250	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.500	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	----	5.00	"	"	"	"	"	
Toluene	"	ND	----	0.500	"	"	"	"	"	
o-Xylene	"	ND	----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	----	2.00	"	"	"	"	"	
Xylenes (total)	"	ND	----	3.00	"	"	"	"	"	
<i>Surrogate(s): 1,2-DCA-d4</i>				96.0%		70 - 130 %	"			"
<i>Toluene-d8</i>				95.5%		75 - 125 %	"			"
<i>4-BFB</i>				98.5%		75 - 125 %	"			"

BPJ0636-02 (MW-2B)		Water		Sampled: 10/27/06 13:40						
tert-Amyl Methyl Ether	EPA 8260B	ND	----	1.00	ug/l	1x	6J31037	10/31/06 14:25	11/01/06 04:22	
Benzene	"	ND	----	0.500	"	"	"	"	"	
tert-Butyl Alcohol	"	ND	----	50.0	"	"	"	"	"	
1,2-Dibromoethane (EDB)	"	ND	----	0.500	"	"	"	"	"	
1,2-Dichloroethane (EDC)	"	ND	----	0.500	"	"	"	"	"	
Diisopropyl ether	"	ND	----	1.00	"	"	"	"	"	
Ethyl tert-butyl ether	"	ND	----	1.00	"	"	"	"	"	
Ethanol	"	ND	----	250	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.500	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	----	5.00	"	"	"	"	"	
Toluene	"	ND	----	0.500	"	"	"	"	"	
o-Xylene	"	ND	----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	----	2.00	"	"	"	"	"	
Xylenes (total)	"	ND	----	3.00	"	"	"	"	"	
<i>Surrogate(s): 1,2-DCA-d4</i>				95.0%		70 - 130 %	"			"
<i>Toluene-d8</i>				95.0%		75 - 125 %	"			"
<i>4-BFB</i>				97.5%		75 - 125 %	"			"

TestAmerica - Seattle, WA

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Sandra Yakamovich

Sandra Yakamovich, Project Manager



Delta Environmental 4006 148th Ave NE Redmond, WA/USA 98052	Project Name: Shell-21641 Maple Valley HWY; Maple Valley, WA Project Number: 97420022 Project Manager: Dawna Leong	Report Created: 11/27/06 15:05
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Oxygenates by EPA Method 8260B
TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BPJ0636-03 (MW-12)		Water			Sampled: 10/27/06 14:40					
tert-Amyl Methyl Ether	EPA 8260B	ND	----	1.00	ug/l	1x	6J31037	10/31/06 14:25	11/01/06 04:48	
Benzene	"	ND	----	0.500	"	"	"	"	"	
tert-Butyl Alcohol	"	ND	----	50.0	"	"	"	"	"	
1,2-Dibromoethane (EDB)	"	ND	----	0.500	"	"	"	"	"	
1,2-Dichloroethane (EDC)	"	ND	----	0.500	"	"	"	"	"	
Diisopropyl ether	"	ND	----	1.00	"	"	"	"	"	
Ethyl tert-butyl ether	"	ND	----	1.00	"	"	"	"	"	
Ethanol	"	ND	----	250	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.500	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	----	5.00	"	"	"	"	"	
Toluene	"	ND	----	0.500	"	"	"	"	"	
o-Xylene	"	ND	----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	----	2.00	"	"	"	"	"	
Xylenes (total)	"	ND	----	3.00	"	"	"	"	"	
<i>Surrogate(s): 1,2-DCA-d4</i>				95.5%			70 - 130 %	"	"	
<i>Toluene-d8</i>				92.0%			75 - 125 %	"	"	
<i>4-BFB</i>				99.5%			75 - 125 %	"	"	

BPJ0636-04 (MW-13)		Water			Sampled: 10/27/06 14:20					
tert-Amyl Methyl Ether	EPA 8260B	ND	----	1.00	ug/l	1x	6J31037	10/31/06 14:25	11/01/06 05:15	
Benzene	"	ND	----	0.500	"	"	"	"	"	
tert-Butyl Alcohol	"	ND	----	50.0	"	"	"	"	"	
1,2-Dibromoethane (EDB)	"	ND	----	0.500	"	"	"	"	"	
1,2-Dichloroethane (EDC)	"	ND	----	0.500	"	"	"	"	"	
Diisopropyl ether	"	ND	----	1.00	"	"	"	"	"	
Ethyl tert-butyl ether	"	ND	----	1.00	"	"	"	"	"	
Ethanol	"	ND	----	250	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.500	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	----	5.00	"	"	"	"	"	
Toluene	"	ND	----	0.500	"	"	"	"	"	
o-Xylene	"	ND	----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	----	2.00	"	"	"	"	"	
Xylenes (total)	"	ND	----	3.00	"	"	"	"	"	
<i>Surrogate(s): 1,2-DCA-d4</i>				98.0%			70 - 130 %	"	"	
<i>Toluene-d8</i>				93.0%			75 - 125 %	"	"	
<i>4-BFB</i>				99.5%			75 - 125 %	"	"	

TestAmerica - Seattle, WA

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Sandra Yakamovich

Sandra Yakamovich, Project Manager



Delta Environmental 4006 148th Ave NE Redmond, WA/USA 98052	Project Name: Shell-21641 Maple Valley HWY; Maple Valley, WA Project Number: 97420022 Project Manager: Dawna Leong	Report Created: 11/27/06 15:05
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Oxygenates by EPA Method 8260B
TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BPJ0636-05 (TRIP BLANK)		Water					Sampled: 10/27/06 16:55			
tert-Amyl Methyl Ether	EPA 8260B	ND	----	1.00	ug/l	1x	6J31037	10/31/06 14:25	11/01/06 02:09	
Benzene	"	ND	----	0.500	"	"	"	"	"	
tert-Butyl Alcohol	"	ND	----	50.0	"	"	"	"	"	
1,2-Dibromoethane (EDB)	"	ND	----	0.500	"	"	"	"	"	
1,2-Dichloroethane (EDC)	"	ND	----	0.500	"	"	"	"	"	
Diisopropyl ether	"	ND	----	1.00	"	"	"	"	"	
Ethyl tert-butyl ether	"	ND	----	1.00	"	"	"	"	"	
Ethanol	"	ND	----	250	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.500	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	----	5.00	"	"	"	"	"	
Toluene	"	ND	----	0.500	"	"	"	"	"	
o-Xylene	"	ND	----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	----	2.00	"	"	"	"	"	
Xylenes (total)	"	ND	----	3.00	"	"	"	"	"	
<i>Surrogate(s): 1,2-DCA-d4</i>			97.0%		70 - 130 %	"				"
<i>Toluene-d8</i>			92.0%		75 - 125 %	"				"
<i>4-BFB</i>			98.5%		75 - 125 %	"				"

TestAmerica - Seattle, WA

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Sandra Yakamavich

Sandra Yakamavich, Project Manager



Delta Environmental 4006 148th Ave NE Redmond, WA/USA 98052	Project Name: Shell-21641 Maple Valley HWY; Maple Valley, WA Project Number: 97420022 Project Manager: Dawna Leong	Report Created: 11/27/06 15:05
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Extractable Petroleum Hydrocarbons
TestAmerica - Nashville, TN

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BPJ0636-01 (MW-1B)		Water			Sampled: 10/27/06 14:10					
Diesel	NWTPH-Dx	ND	----	96.2	ug/L	1x	6106320	11/01/06 08:46	11/01/06 20:39	
Motor Oil	"	ND	----	96.2	"	"	"	"	"	
Surrogate(s): o-Terphenyl			95%		51 - 142 %	"				
BPJ0636-02 (MW-2B)		Water			Sampled: 10/27/06 13:40					
Diesel	NWTPH-Dx	ND	----	97.1	ug/L	1x	6106320	11/01/06 08:46	11/01/06 20:58	
Motor Oil	"	ND	----	97.1	"	"	"	"	"	
Surrogate(s): o-Terphenyl			95%		51 - 142 %	"				
BPJ0636-03 (MW-12)		Water			Sampled: 10/27/06 14:40					
Diesel	NWTPH-Dx	ND	----	96.2	ug/L	1x	6106320	11/01/06 08:46	11/01/06 21:17	
Motor Oil	"	138	----	96.2	"	"	"	"	"	
Surrogate(s): o-Terphenyl			76%		51 - 142 %	"				
BPJ0636-04 (MW-13)		Water			Sampled: 10/27/06 14:20					
Diesel	NWTPH-Dx	ND	----	96.2	ug/L	1x	6106320	11/01/06 08:46	11/01/06 21:37	
Motor Oil	"	129	----	96.2	"	"	"	"	"	
Surrogate(s): o-Terphenyl			61%		51 - 142 %	"				

Sandra Yakamavich

Sandra Yakamavich, Project Manager



Delta Environmental 4006 148th Ave NE Redmond, WA/USA 98052	Project Name: Shell-21641 Maple Valley HWY; Maple Valley, WA Project Number: 97420022 Project Manager: Dawna Leong	Report Created: 11/27/06 15:05
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Volatile Petroleum Products by NWTPH-Gx - Laboratory Quality Control Results
 TestAmerica - Seattle, WA

QC Batch: 6K01018 **Water Preparation Method: EPA 5030B (P/T)**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes		
Blank (6K01018-BLK1)													Extracted: 11/01/06 10:05			
Gasoline Range Hydrocarbons	NWTPH-Gx	ND	---	50.0	ug/l	1x	--	--	--	--	--	--	11/01/06 12:55			
<i>Surrogate(s): 4-BFB (FID)</i>		<i>Recovery: 82.3%</i>		<i>Limits: 58-144%</i>	"								11/01/06 12:55			
LCS (6K01018-BS1)													Extracted: 11/01/06 10:05			
Gasoline Range Hydrocarbons	NWTPH-Gx	940	---	50.0	ug/l	1x	--	1000	94.0%	(80-120)	--	--	11/01/06 13:25			
<i>Surrogate(s): 4-BFB (FID)</i>		<i>Recovery: 97.2%</i>		<i>Limits: 58-144%</i>	"								11/01/06 13:25			
Duplicate (6K01018-DUP1)													QC Source: BPJ0635-01		Extracted: 11/01/06 10:05	
Gasoline Range Hydrocarbons	NWTPH-Gx	ND	---	50.0	ug/l	1x	ND	--	--	--	NR	(25)	11/01/06 14:34	RP-4		
<i>Surrogate(s): 4-BFB (FID)</i>		<i>Recovery: 83.3%</i>		<i>Limits: 58-144%</i>	"								11/01/06 14:34			
Duplicate (6K01018-DUP2)													QC Source: BPJ0636-04		Extracted: 11/01/06 10:05	
Gasoline Range Hydrocarbons	NWTPH-Gx	ND	---	50.0	ug/l	1x	ND	--	--	--	NR	(25)	11/01/06 23:33	RP-4		
<i>Surrogate(s): 4-BFB (FID)</i>		<i>Recovery: 84.0%</i>		<i>Limits: 58-144%</i>	"								11/01/06 23:33			
Matrix Spike (6K01018-MS1)													QC Source: BPJ0635-01		Extracted: 11/01/06 10:05	
Gasoline Range Hydrocarbons	NWTPH-Gx	1040	---	50.0	ug/l	1x	17.2	1000	102%	(75-131)	--	--	11/01/06 17:05			
<i>Surrogate(s): 4-BFB (FID)</i>		<i>Recovery: 97.7%</i>		<i>Limits: 58-144%</i>	"								11/01/06 17:05			
Matrix Spike Dup (6K01018-MSD1)													QC Source: BPJ0635-01		Extracted: 11/01/06 10:05	
Gasoline Range Hydrocarbons	NWTPH-Gx	991	---	50.0	ug/l	1x	17.2	1000	97.4%	(75-131)	4.83%	(25)	11/01/06 17:34			
<i>Surrogate(s): 4-BFB (FID)</i>		<i>Recovery: 94.7%</i>		<i>Limits: 58-144%</i>	"								11/01/06 17:34			

Sandra Yakamovich

Sandra Yakamovich, Project Manager



Delta Environmental 4006 148th Ave NE Redmond, WA/USA 98052	Project Name: Shell-21641 Maple Valley HWY; Maple Valley, WA Project Number: 97420022 Project Manager: Dawna Leong	Report Created: 11/27/06 15:05
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Oxygenates by EPA Method 8260B - Laboratory Quality Control Results
 TestAmerica - Seattle, WA

QC Batch: 6J31037 Water Preparation Method: EPA 5030B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (6J31037-BLK1)													Extracted: 10/31/06 14:25	
tert-Amyl Methyl Ether	EPA 8260B	ND	---	1.00	ug/l	1x	--	--	--	--	--	--	11/01/06 01:16	
Benzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
tert-Butyl Alcohol	"	ND	---	50.0	"	"	--	--	--	--	--	--	"	
1,2-Dibromoethane (EDB)	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
1,2-Dichloroethane (EDC)	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Diisopropyl ether	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Ethyl tert-butyl ether	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Ethanol	"	ND	---	250	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Methyl tert-butyl ether	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
o-Xylene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
m,p-Xylene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
Xylenes (total)	"	ND	---	3.00	"	"	--	--	--	--	--	--	"	
<i>Surrogate(s): 1,2-DCA-d4</i>		<i>Recovery:</i>	<i>97.5%</i>	<i>Limits:</i>	<i>70-130%</i>	<i>"</i>							<i>11/01/06 01:16</i>	
<i>Toluene-d8</i>			<i>95.0%</i>		<i>75-125%</i>	<i>"</i>							<i>"</i>	
<i>4-BFB</i>			<i>100%</i>		<i>75-125%</i>	<i>"</i>							<i>"</i>	

LCS (6J31037-BS1)													Extracted: 10/31/06 14:25	
tert-Amyl Methyl Ether	EPA 8260B	21.1	---	1.00	ug/l	1x	--	20.0	106%	(75-125)	--	--	11/01/06 00:23	
Benzene	"	19.1	---	0.500	"	"	--	"	95.5%	(80-120)	--	--	"	
tert-Butyl Alcohol	"	113	---	50.0	"	"	--	100	113%	(75-125)	--	--	"	
1,2-Dibromoethane (EDB)	"	18.3	---	0.500	"	"	--	20.0	91.5%	"	--	--	"	
1,2-Dichloroethane (EDC)	"	20.6	---	0.500	"	"	--	"	103%	"	--	--	"	
Diisopropyl ether	"	21.6	---	1.00	"	"	--	"	108%	"	--	--	"	
Ethyl tert-butyl ether	"	21.1	---	1.00	"	"	--	"	106%	"	--	--	"	
Ethanol	"	1090	---	250	"	"	--	1000	109%	"	--	--	"	
Ethylbenzene	"	16.4	---	0.500	"	"	--	20.0	82.0%	"	--	--	"	
Methyl tert-butyl ether	"	20.4	---	5.00	"	"	--	"	102%	(75-126)	--	--	"	
Toluene	"	17.2	---	0.500	"	"	--	"	86.0%	(75-125)	--	--	"	
o-Xylene	"	16.9	---	1.00	"	"	--	"	84.5%	(75-130)	--	--	"	
m,p-Xylene	"	37.9	---	2.00	"	"	--	40.0	94.8%	(75-125)	--	--	"	
Xylenes (total)	"	54.8	---	3.00	"	"	--	60.0	91.3%	"	--	--	"	
<i>Surrogate(s): 1,2-DCA-d4</i>		<i>Recovery:</i>	<i>96.5%</i>	<i>Limits:</i>	<i>70-130%</i>	<i>"</i>							<i>11/01/06 00:23</i>	
<i>Toluene-d8</i>			<i>91.5%</i>		<i>75-125%</i>	<i>"</i>							<i>"</i>	
<i>4-BFB</i>			<i>98.0%</i>		<i>75-125%</i>	<i>"</i>							<i>"</i>	

TestAmerica - Seattle, WA

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Sandra Yakamovich

Sandra Yakamovich, Project Manager



Delta Environmental 4006 148th Ave NE Redmond, WA/USA 98052	Project Name: Shell-21641 Maple Valley HWY; Maple Valley, WA Project Number: 97420022 Project Manager: Dawna Leong	Report Created: 11/27/06 15:05
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Oxygenates by EPA Method 8260B - Laboratory Quality Control Results
 TestAmerica - Seattle, WA

QC Batch: 6J31037 Water Preparation Method: EPA 5030B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS Dup (6J31037-BSD1)										Extracted: 10/31/06 14:25				
tert-Amyl Methyl Ether	EPA 8260B	20.2	---	1.00	ug/l	1x	--	20.0	101%	(75-125)	4.36% (25)		11/01/06 00:49	
Benzene	"	19.0	---	0.500	"	"	--	"	95.0%	(80-120)	0.525% (20)		"	
tert-Butyl Alcohol	"	105	---	50.0	"	"	--	100	105%	(75-125)	7.34% (25)		"	
1,2-Dibromoethane (EDB)	"	18.5	---	0.500	"	"	--	20.0	92.5%	"	1.09%	"	"	
1,2-Dichloroethane (EDC)	"	20.4	---	0.500	"	"	--	"	102%	"	0.976%	"	"	
Diisopropyl ether	"	20.5	---	1.00	"	"	--	"	102%	"	5.23%	"	"	
Ethyl tert-butyl ether	"	19.9	---	1.00	"	"	--	"	99.5%	"	5.85%	"	"	
Ethanol	"	1020	---	250	"	"	--	1000	102%	"	6.64%	"	"	
Ethylbenzene	"	17.0	---	0.500	"	"	--	20.0	85.0%	"	3.59% (20)		"	
Methyl tert-butyl ether	"	19.6	---	5.00	"	"	--	"	98.0%	(75-126)	4.00%	"	"	
Toluene	"	17.6	---	0.500	"	"	--	"	88.0%	(75-125)	2.30%	"	"	
o-Xylene	"	17.3	---	1.00	"	"	--	"	86.5%	(75-130)	2.34%	"	"	
m,p-Xylene	"	38.7	---	2.00	"	"	--	40.0	96.8%	(75-125)	2.09%	"	"	
Xylenes (total)	"	56.0	---	3.00	"	"	--	60.0	93.3%	"	2.17%	"	"	
<i>Surrogate(s): 1,2-DCA-d4</i>		<i>Recovery: 94.0%</i>		<i>Limits: 70-130%</i>								<i>11/01/06 00:49</i>		
<i>Toluene-d8</i>		<i>94.0%</i>		<i>75-125%</i>								<i>"</i>		
<i>4-BFB</i>		<i>99.5%</i>		<i>75-125%</i>								<i>"</i>		

Sandra Yakamovich

Sandra Yakamovich, Project Manager



Delta Environmental 4006 148th Ave NE Redmond, WA/USA 98052	Project Name: Shell-21641 Maple Valley HWY; Maple Valley, WA Project Number: 97420022 Project Manager: Dawna Leong	Report Created: 11/27/06 15:05
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Extractable Petroleum Hydrocarbons - Laboratory Quality Control Results
 TestAmerica - Nashville, TN

QC Batch: 6106320 Water Preparation Method: EPA 3510C

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (6106320-BLK1)										Extracted: 11/01/06 08:46				
Diesel	NWTPH-Dx	ND	---	100	ug/L	1x	--	--	--	--	--	--	11/01/06 19:03	
Motor Oil	"	ND	---	100	"	"	--	--	--	--	--	--	"	
<i>Surrogate(s): o-Terphenyl</i>		<i>Recovery: 84%</i>		<i>Limits: 51-142%</i>		"						<i>11/01/06 19:03</i>		
LCS (6106320-BS1)										Extracted: 11/01/06 08:46				
Diesel	NWTPH-Dx	944	---	100	ug/L	1x	--	1000	94%	(56-116)	--	--	11/01/06 19:23	
<i>Surrogate(s): o-Terphenyl</i>		<i>Recovery: 86%</i>		<i>Limits: 51-142%</i>		"						<i>11/01/06 19:23</i>		

Sandra Yakamovich
 Sandra Yakamovich, Project Manager



Delta Environmental

4006 148th Ave NE
Redmond, WA/USA 98052

Project Name: **Shell-21641 Maple Valley HWY; Maple Valley, WA**

Project Number: 97420022

Project Manager: Dawna Leong

Report Created:

11/27/06 15:05

Notes and Definitions

Report Specific Notes:

RP-4 - Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.

Laboratory Reporting Conventions:

- DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
- ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
- NR/NA - Not Reported / Not Available
- dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
- wet - Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
- RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
- MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
- MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
- Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
- Reporting Limits - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
- Electronic Signature - Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Sandra Yakamavich

Sandra Yakamavich, Project Manager



TEST AMERICA



Shell Oil Products US Chain Of Custody Record

6710436

- 11720 North Creek Pkwy #400, Bothell, WA
- 9405 S. W. Nimbus Ave., Beaverton, OR 97008
- East 11115 Montgomery, Suite B, Spokane, WA 99206

SOP US Project Manager to be invoiced:

- SCIENCE & ENGINEERING
- TECHNICAL SERVICES
- CRMT HOUSTON
- BILL CONSULTANT

Carol Compagna

NAME OF PM TO BILL:

NAME OF TS TO BILL:

INCIDENT # (FILE ONLY)

97420022

REP or CRMT # (TRACRMT)

120891

DATE:

10/27/2006

PAGE:

1 of 1

CONSULTANT COMPANY: **Delta Consultants**
 ADDRESS: **4006 148th Ave NE**
 CITY: **Redmond, WA 98052**
 TELEPHONE: **425.882.3528** FAX: **425.869.1892** E-MAIL: **dleong@deltsenv.com**
 TURNAROUND TIME (CALENDAR DAYS):
 STANDARD (10 DAY) 5 DAYS 3 DAYS 2 DAYS 24 HOURS RESULTS NEEDED ON WEEKEND
 TEMPERATURE ON RECEIPT C°

SITE ADDRESS (Street and City): **21641 Maple Valley Hwy; Maple Valley, WA**
 PROJECT CONTACT (Report to): **Dawn Leong**
 CONSULTANT PROJECT NO.: **ST21-641-G**
 SAMPLER NAME(S) (Print): **Jamcy Peterson**
 LAB USE ONLY

REQUESTED ANALYSIS if more than one method is listed, circle one

SPECIAL INSTRUCTIONS OR NOTES: **TPH-D Bottles: * MW-1B, MW-2B, & MW-13 are in Unpreserved 2mlbers**

DATE TIME LAB	Field Sample Identification	SAMPLING		MATRIX	PRESERVATIVE					NO. OF CONT.	TPH - Purgeable (B015) (RO)	TPH - Extractable (B015) (RO)	BTEX (MTBE (B021B, B02, B240) (B24)	BTEX (MTBE + Oxygenates (B030B)	VOCs Full List + Oxygenates (B100B)	Ethanol	PCRA Metals	4 PCRA Metals (As, Cd, Cr, Pb)	Metals (Specify)	Container PID Readings or Laboratory Notes
		DATE	TIME		HCL	HNO3	H2SO4	NONE	OTHER											
	MW-1B	10/27/06	14:10	H ₂ O	6-V			2-A		8	X	X	X	X						01
	MW-2B		13:40		6-V			2-A		8	X	X	X	X						02
	MW-12		14:40		6-V			2-A		8	X	X	X	X						03
	MW-13	10/27/06	14:20	H ₂ O	6-V			2-A		8	X	X	X	X						04
	Trip Blank			H ₂ O						2			X							05

Relinquished by: (Signature) <i>Jamcy Peterson</i>	Received by: (Signature) <i>Steph Spinnacorp</i>	Date: 10/27	Time: 16:55
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.

w/o 11.6