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TRANSMITTAL

DATE: October 25, 2010 REFERENCE NO.: 241739
 PROJECT NAME: 6808 196th Street SW, Lynnwood, WA
 TO: Department of Ecology - NWRO
Attn: Libby Goldstein
3190 160th Ave. SE
Bellevue, WA 98008-5452



Please find enclosed: Draft Final
 Originals Other
 Prints

Sent via: Mail Same Day Courier
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QUANTITY	DESCRIPTION
1	2010 Annual Groundwater Monitoring Report

As Requested For Review and Comment
 For Your Use

COMMENTS:

Copy to: Mr. Perry Pineda, Shell Oil
Products US (Livelink)
Bob Cahill, Heartland Automotive
Services, Inc.

Completed by: Heather Bays
[Please Print]

Signed:



2010 ANNUAL GROUNDWATER MONITORING REPORT

FORMER JIFFY LUBE FACILITY
6808 196th STREET SOUTHWEST
LYNNWOOD, WASHINGTON

SAP CODE 171152
INCIDENT NO. 97605410
AGENCY NO. 27496218
VCP NO. NW2070

OCTOBER 25, 2010
REF. NO. 241739 (6)
This report is printed on recycled paper.

Prepared by:
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1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) prepared this report on behalf of Equilon Enterprises LLC dba Shell Oil Products US (SOPUS). This annual report includes all monitoring data collected in 2010.

1.1 SITE INFORMATION

Site Address	6808 196 th Street Southwest, Lynnwood
Site Use	Former Jiffy Lube Facility
Shell Project Manager	Perry Pineda
CRA Project Manager	Christina McClelland
Lead Agency and Contact	WDOE, Libby Goldstein
Agency Case No.	27496218
Shell SAP Code:	171152
Shell Incident No.	97605410
VCP No.	NW2070

The most recent agency correspondence on record is from March 5, 2009.

2.0 SITE ACTIVITIES, FINDINGS, AND DISCUSSION

2.1 CURRENT ACTIVITIES

Blaine Tech Services, Inc. (Blaine) gauged and sampled wells according to the established monitoring program for this site. Sampling was suspended during the first quarter of 2010 so that further site investigation work could be completed. Quarterly bailing of SPH from monitoring wells MW-3, MW-4, and MW-5 was also conducted.

CRA prepared a vicinity map (Figure 1) and groundwater elevation contour and chemical concentration map (Figure 2). CRA prepared Table 1 summarizing groundwater monitoring data and laboratory analytical results. Field forms and the laboratory analytical report are included as Appendices A and B.

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2.2 FINDINGS

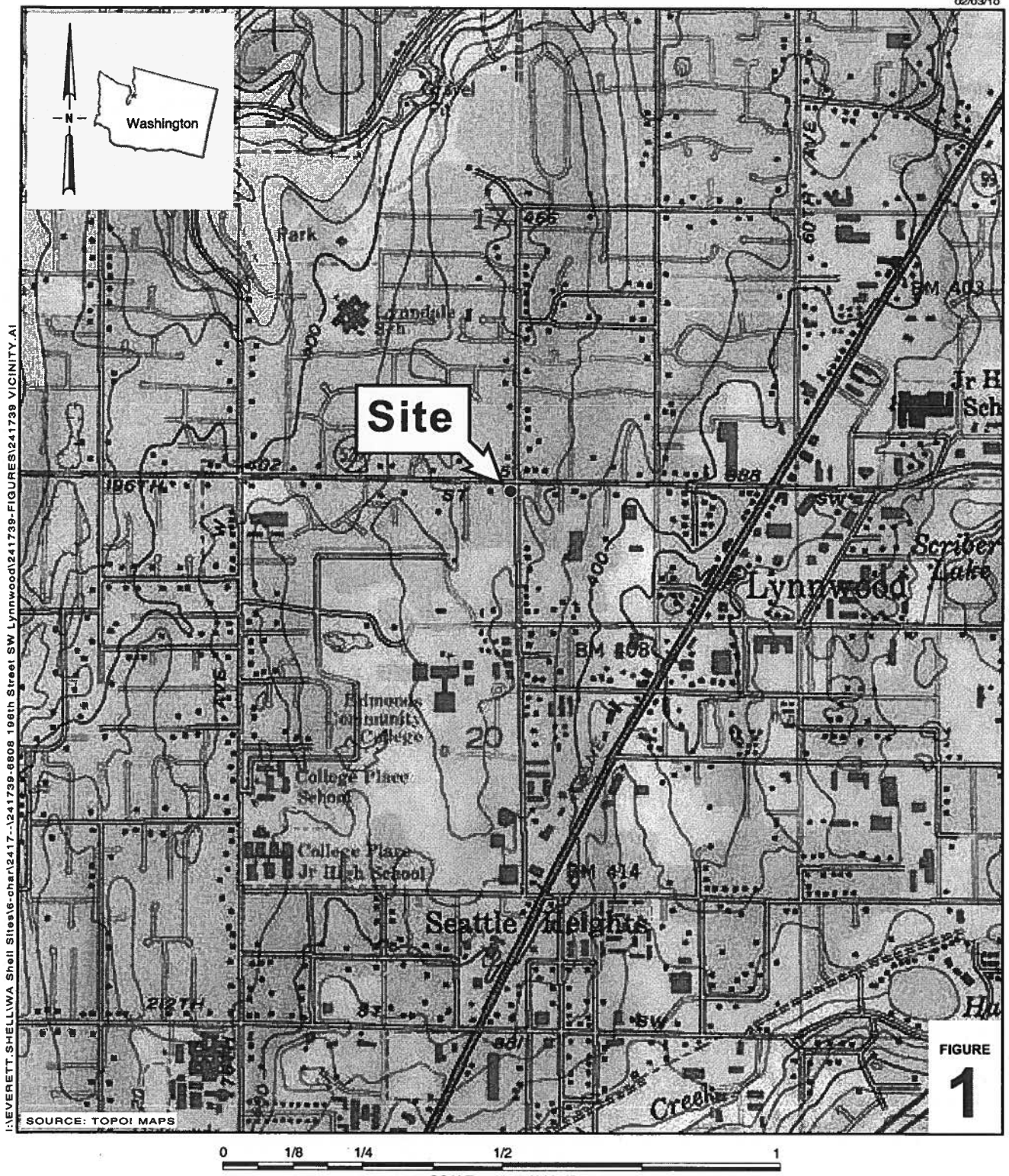
Quarter/Date	3 rd /July 29, 2010
Groundwater Flow Direction	southwest
Hydraulic Gradient	0.04 feet/foot
Depth to Water	7.69 to 11.86 feet below top of well casing

All of Which is Respectfully Submitted,
CONESTOGA-ROVERS & ASSOCIATES


Heather Bays


Christina McClelland

FIGURES



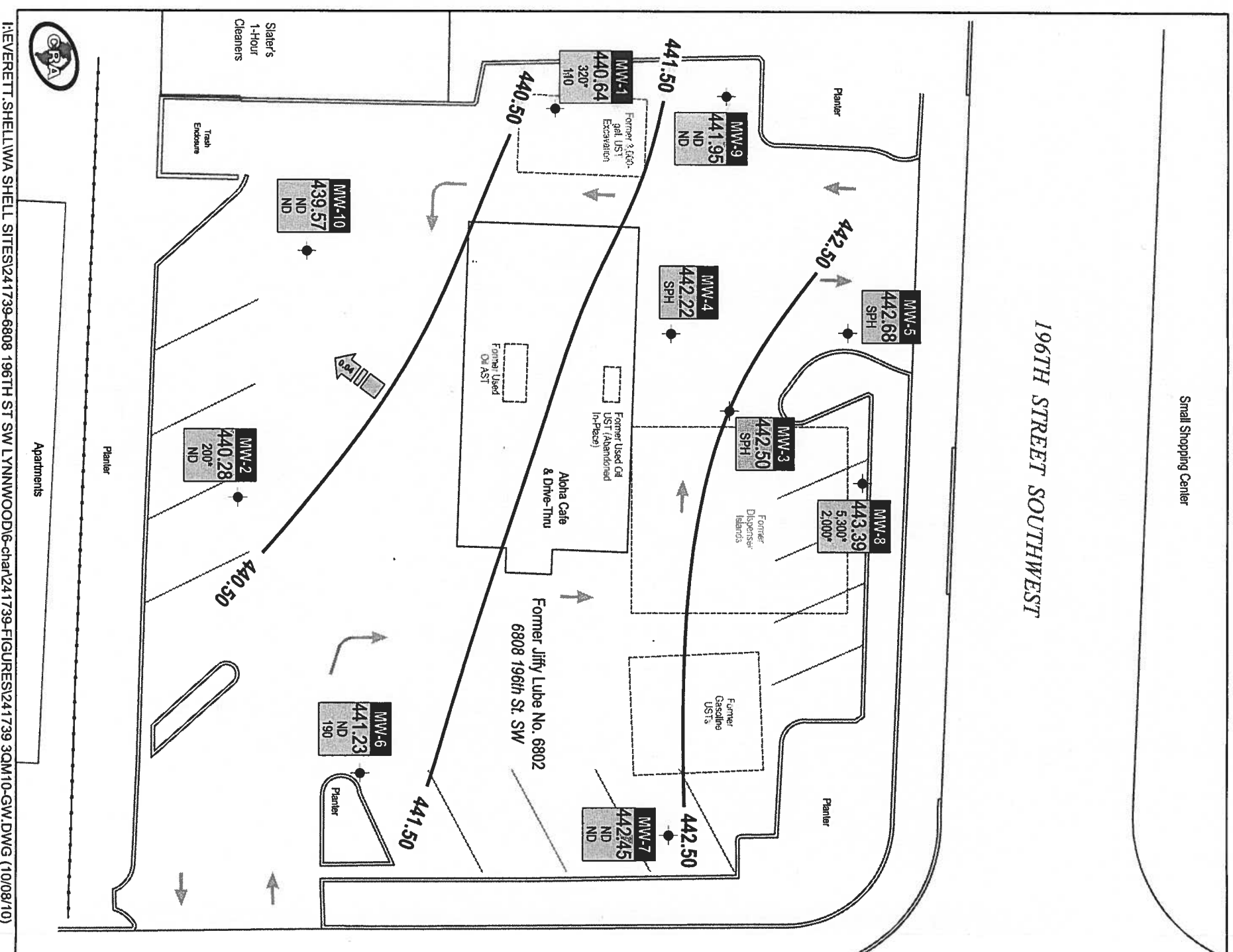
I:\EVERETT-SHELLWA Shell Sites\6-char\2417--\241739-6808 196th Street SW Lynnwood\241739-FIGURES\241739 VICINITY.A1

FIGURE
1

Former Jiffy Lube Facility
6808 196th Street Southwest
Lynnwood, Washington



Vicinity Map



HEVERETT, SHELL/WA SHELL SITES\241739-6808 196TH ST SW LYNNWOOD\6-char\241739-FIGURES\241739 3QM10-GW.DWG (10/08/10)

EXPLANATION

- MW-1 • Monitoring well location
- Groundwater flow direction and gradient
- ~x.x~ Groundwater elevation contour, in feet above mean sea level (msl)
- Well designation
- ELEV — Groundwater elevation, in feet above msl
- TPHd — TPHd and TPHo concentrations are in micrograms per liter

Notes:

- ND = Not detected
- SPH = Separate-phase hydrocarbons present, well not sampled
- * = The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard.

68TH AVENUE WEST

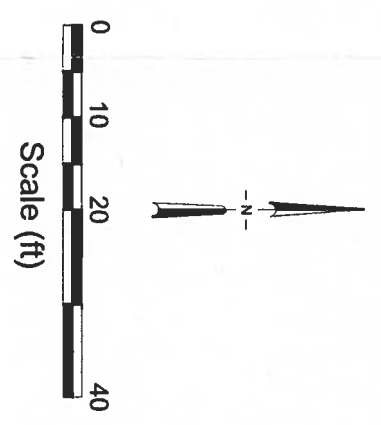


FIGURE 2
 Groundwater Elevation and Chemical Concentration Map
 July 29, 2010
 Former Jiffy Lube Facility
 6808 196th Street Southwest, Lynnwood, Washington



TABLES

TABLE 1

SUMMARY OF GROUNDWATER MONITORING DATA
FORMER JIFFY LUBE FACILITY
6808 196TH STREET SOUTHWEST,
LYNNWOOD, WASHINGTON

Sample ID	Date Model Toxics Central Act Method A Cleanup Levels	TOC	DTW	GWE	SPH Thickness	HYDROCARBONS			PRIMARY VOCs					OXYGENATES					LEAD Total 15				
						TPHg 800/1000	TPHd 500	TPHo 500	B 5	T 1000	E 700	X 1000	EDB 0.01	EDC 5	MTBE 20	TBA NE	DIPE NE	ETBE NE		TAME NE			
MW-1	12/28/06	451.74	9.75	441.99	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-1	12/29/06	451.74	9.57	442.17	0.00	42,100	<25	<510 m	9,190	2,140	1,090	4,100	—	—	—	—	—	—	—	—	—	—	—
MW-1	02/15/07	451.74	10.10	441.64	0.00	41,200	<269	<538 m	9,230	1,840	938	3,710	—	—	—	—	—	—	—	—	—	—	—
MW-1	04/06/07	451.74	10.71	441.03	0.00	30,200	<258	<515 m	7,450	732	718	2,310	—	—	—	—	—	—	—	—	—	—	—
MW-1	07/09/07	451.74	10.78	440.96	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-1	07/28/07	451.74	11.01	440.73	0.00	5,850	<258	<515 m	2,400	32.4	131	190	—	—	—	—	—	—	—	—	—	—	—
MW-1	10/01/07	451.74	13.98	437.76	0.00	23,900	1,540 f,g	<105	6,270	196	653	1,340	—	—	—	—	—	—	—	—	—	—	—
MW-1	01/10/08	451.74	9.43	442.31	0.00	73,000	<243	<485	16,500	4,010	1,610	6,790	—	—	—	—	—	—	—	—	—	—	—
MW-1	07/10/08	451.74	10.81	440.93	0.00	800	1,400	<300	280	13	2	33	—	—	—	—	—	—	—	—	—	—	—
MW-1	01/06/09	451.74	10.16	441.58	0.00	<100	190	<380	1	<1.0	<1.0	<1.0	—	—	—	—	—	—	—	—	—	—	—
MW-1*	07/13/09	451.74	11.14	440.60	0.00	7,500	2,800 j	<100	1,200	60	220	470	<0.010	<0.29	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	3.33
MW-1	07/29/10	451.74	11.10	440.64	0.00	—	320 j	<100	32	2.9	17	48	—	—	—	—	—	—	—	—	—	—	—
MW-2	12/28/06	450.59	7.26	443.33	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-2	12/29/06	450.59	7.35	443.24	0.00	2,640	<253	<505 m	21.7	6.75	55.1	9.91	—	—	—	—	—	—	—	—	—	—	—
MW-2	02/15/07	450.59	8.03	442.56	0.00	249	<278	<536 m	2.06	<0.500	4.36	<1.00	—	—	—	—	—	—	—	—	—	—	—
MW-2	04/06/07	450.59	8.50	442.09	0.00	180	<258	<515 m	1.83	0.518	2.61	<1.00	—	—	—	—	—	—	—	—	—	—	—
MW-2	07/09/07	450.59	8.62	441.97	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-2	07/28/07	450.59	8.96	441.63	0.00	3,200	<255	<510 m	66.1	7.86	137	20.4	—	—	—	—	—	—	—	—	—	—	—
MW-2	10/01/07	450.59	12.54	438.05	0.00	3,980	1,080 g,h	<105	175	13.7	331	47.4	—	—	—	—	—	—	—	—	—	—	—
MW-2	01/10/08	450.59	7.88	442.71	0.00	5,000	<243	<485	214	9.85	502	71.0	—	—	—	—	—	—	—	—	—	—	—
MW-2	07/10/08	450.59	9.96	440.61	0.00	540	<100	<200	4.9	<1	9.4	<1	—	—	—	—	—	—	—	—	—	—	—
MW-2	01/06/09	450.59	8.18	442.41	0.00	9,200	<100	<100	390	16	840	62.0	—	—	—	—	—	—	—	—	—	—	—
MW-2	07/13/09	450.59	10.66	439.93	0.00	320	210 j	<100	3.8	3.3	<1.0	<1.0	<0.010	<0.50	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.00
MW-2	07/29/10	450.59	10.31	440.28	0.00	—	200 j	<100	2.1	<1.0	<1.0	<1.0	—	—	—	—	—	—	—	—	—	—	—
MW-3	12/28/06	451.69	8.45	443.24	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-3	12/29/06	451.69	8.51	443.18	0.00	171,000	608	<510 m	29,500	29,200	2,950	15,900	—	—	—	—	—	—	—	—	—	—	—
MW-3	02/15/07	451.69	9.09	442.60	0.00	263,000 a, b	2,580 c	<2,750 m	29,200	37,400	3,140	18,600	<500 m	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
MW-3	04/06/07	451.69	9.66	442.03	0.00	214,000	867 c	<495	26,600	37,500	2,850	16,800	—	—	—	—	—	—	—	—	—	—	—
MW-3	07/09/07	451.69	9.81	441.88	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-3	07/28/07	451.69	10.13	441.56	0.00	248,000	8,340 e	<5,050 m	29,500	37,400	2,810	12,800	—	—	—	—	—	—	—	—	—	—	—
MW-3	10/01/07	451.69	13.96	437.73	0.00	252,000	185,000 g,h	<10,500 m	29,300	35,200	3,260	19,300	—	—	—	—	—	—	—	—	—	—	—
MW-3	01/10/08	451.69	9.34	442.37 d	0.02	NOT SAMPLED - SPH PRESENT						—	—	—	—	—	—	—	—	—	—	—	—
MW-3	01/14/08	451.69	9.06	442.63	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-3	01/21/08	451.69	8.27	443.42	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-3	02/26/08	451.69	8.40	443.30 d	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-3	07/10/08	451.69	9.02	442.69 d	0.02	NOT SAMPLED - SPH PRESENT						—	—	—	—	—	—	—	—	—	—	—	—
MW-3	08/26/08	451.69	9.55	442.16 d	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-3	09/22/08	451.69	10.00	441.71 d	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-3	01/06/09	451.69	8.47	443.24 d	0.02	NOT SAMPLED - SPH PRESENT						—	—	—	—	—	—	—	—	—	—	—	—
MW-3	07/29/10	451.69	9.21	442.50 d	0.03	NOT SAMPLED - SPH PRESENT						—	—	—	—	—	—	—	—	—	—	—	—
MW-4	12/28/06	452.01	9.41	442.60	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-4	12/29/06	452.01	9.36	442.65	0.00	207,000	1,810	<510 m	32,400	39,700	3,200	18,800	—	—	—	—	—	—	—	—	—	—	—
MW-4	02/15/07	452.01	9.96	442.05	0.00	253,000 a, b	72,100 c	<50,000 m	31,500 a, b	40,500 a, b	2,990 a, b	18,100 a, b	<500 m	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00

SUMMARY OF GROUNDWATER MONITORING DATA
 FORMER JIFFY LUBE FACILITY
 6808 196TH STREET SOUTHWEST,
 LYNNWOOD, WASHINGTON

Sample ID	Date	TOC	DTW	GWE	SPH Thickness	HYDROCARBONS					PRIMARY VOCs					OXYGENATES					LEAD Total 15		
						TPHg 80/100	TPHd 500	TPHo 500	B 5	T 1000	E 700	X 1000	EDB 0.01	EDC 5	MTBE 20	TRA NE	DIBE NE	ETBE NE	TAME NE				
MW-4	04/06/07	452.01	10.41	441.63 d	0.04	NOT SAMPLED - SPH PRESENT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
MW-4	07/09/07	452.01	10.47	441.56 d	0.03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-4	07/28/07	452.01	10.81	441.23 d	0.04	NOT SAMPLED - SPH PRESENT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-4	10/01/07	452.01	14.24	437.87 d	0.13	NOT SAMPLED - SPH PRESENT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-4	11/12/07	452.01	13.83	438.31 d	0.16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-4	11/20/07	452.01	13.68	438.44 d	0.14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-4	11/26/07	452.01	13.52	438.58 d	0.11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-4	12/08/07	452.01	12.87	439.22 d	0.10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-4	12/14/08	452.01	12.41	439.66 d	0.07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-4	12/19/07	452.01	12.33	439.72 d	0.05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-4	12/28/07	452.01	12.24	439.80 d	0.04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-4	01/10/08	452.01	9.61	442.42 d	0.03	NOT SAMPLED - SPH PRESENT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-4	01/14/08	452.01	9.23	442.80 d	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-4	01/21/08	452.01	8.07	443.96 d	0.03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-4	02/26/08	452.01	9.03	443.00 d	0.03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-4	07/10/08	452.01	9.71	442.41 d	0.14	NOT SAMPLED - SPH PRESENT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-4	08/26/08	452.01	10.52	441.68 d	0.24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-4	09/22/08	452.01	11.01	441.27 d	0.34	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-4	01/06/09	452.01	9.24	442.79 d	0.02	NOT SAMPLED - SPH PRESENT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-4	07/29/10	452.01	9.81	442.22 d	0.02	NOT SAMPLED - SPH PRESENT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	12/28/06	451.38	8.11	443.27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	12/29/06	451.38	8.17	443.21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	02/15/07	451.38	8.49	442.89	---	771,000 a, b	603	<515 m	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	04/06/07	451.38	9.08	442.32 d	0.03	NOT SAMPLED - SPH PRESENT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	07/09/07	451.38	9.19	442.21 d	0.03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	07/28/07	451.38	9.58	441.83 d	0.04	NOT SAMPLED - SPH PRESENT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	10/01/07	451.38	13.16	438.28 d	0.08	NOT SAMPLED - SPH PRESENT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	11/12/07	451.38	12.74	438.69 d	0.06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	11/20/07	451.38	12.55	438.89 d	0.08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	11/26/07	451.38	12.48	438.95 d	0.06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	12/05/07	451.38	11.74	439.72 d	0.10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	12/14/07	451.38	11.53	439.90 d	0.06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	12/19/07	451.38	11.41	440.00 d	0.04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	12/28/07	451.38	11.29	440.12 d	0.04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	01/10/08	451.38	8.70	442.70 d	0.02	NOT SAMPLED - SPH PRESENT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	01/14/08	451.38	8.70	442.68	0.00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	01/21/08	451.38	8.00	443.54 d	0.20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	02/26/08	451.38	8.02	443.50 d	0.17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	07/10/08	451.38	8.68	442.97 d	0.34	NOT SAMPLED - SPH PRESENT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	08/26/08	451.38	8.86	442.73 d	0.26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	09/22/08	451.38	9.18	442.36 d	0.20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	01/06/09	451.38	7.80	443.60 d	0.02	NOT SAMPLED - SPH PRESENT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	07/29/10	451.38	8.72	442.68 d	0.02	NOT SAMPLED - SPH PRESENT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-6	07/09/07	449.40	8.33	441.07	0.00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 1

SUMMARY OF GROUNDWATER MONITORING DATA
 FORMER JEFFY LUBE FACILITY
 6008 196TH STREET SOUTHWEST,
 LYNNWOOD, WASHINGTON

Sample ID	Date	TOC	DTW	GWE	SPH Thickness	HYDROCARBONS					PRIMARY VOCs				OXYGENATES				LEAD Total		
						TPHg 800/1000	TPHd 500	TPHo 500	B 5	T 1000	E 700	X 1000	EDB 0.01	EDC 5	MTBE 20	TBA NE	DIBE NE	ETBE NE		TAME NE	
MW-6	07/28/07	449.40	8.61	440.79	0.00	52.4	<253	<505 m	<0.500	1.25	<0.500	<1.00	—	—	—	—	—	—	—	—	—
MW-6	10/01/07	449.40	12.22	437.18	0.00	<250	<105	<105	<1.00	<1.00	<1.00	<3.00	—	—	—	—	—	—	—	—	—
MW-6	01/10/08	449.40	7.86	441.54	0.00	<50.0	<250	<500	<0.500	<0.500	<0.500	<3.00	—	—	—	—	—	—	—	—	—
MW-6	07/10/08	449.40	7.87	441.53	0.00	<50	<500	<200	<1	<1	<1	<1	—	—	—	—	—	—	—	—	—
MW-6	01/06/09	449.40	6.10	443.30	0.00	<100	<100	<100	<0.50	<1.0	<1.0	<1.0	—	—	—	—	—	—	—	—	—
MW-6	07/13/09	449.40	8.47	440.93	0.00	—	—	—	—	—	—	<1.0	—	—	—	—	—	—	—	—	—
MW-6	07/29/10	449.40	8.17	441.23	0.00	—	<100	190	<0.50	<1.0	<1.0	<1.0	—	—	—	—	—	—	—	—	—
MW-7	07/09/07	450.14	7.81	442.33	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-7	07/28/07	450.14	8.03	442.11	0.00	<50.0	<253	<495	<0.500	<0.500	<0.500	<1.00	—	—	—	—	—	—	—	—	—
MW-7	10/01/07	450.14	11.71	438.43	0.00	<250	<111	<111	1.78	<1.00	<1.00	<3.00	—	—	—	—	—	—	—	—	—
MW-7	01/10/08	450.14	7.32	442.82	0.00	51.2	<250	<500	68.4	1.26	79.7	110	—	—	—	—	—	—	—	—	—
MW-7	07/10/08	450.14	7.27	442.87	0.00	<50	<500	<200	<1	<1	<1	<1	—	—	—	—	—	—	—	—	—
MW-7	01/06/09	450.14	7.07	443.07	0.00	<100	<100	<100	<0.50	<1.0	<1.0	<1.0	—	—	—	—	—	—	—	—	—
MW-7	07/13/09	450.14	7.70	442.44	0.00	—	—	—	2.7	<1.0	<1.0	<1.0	—	—	—	—	—	—	—	—	—
MW-7	07/29/10	450.14	7.69	442.45	0.00	—	<100	<100	<0.50	<1.0	<1.0	<1.0	—	—	—	—	—	—	—	—	—
MW-8	07/09/07	451.31	8.63	442.68	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-8	07/28/07	451.31	8.97	442.34	0.00	266,000	8,580 e	<5,210 m	20,500	43,600	3,550	23,000	—	—	—	—	—	—	—	—	—
MW-8	10/01/07	451.31	12.58	438.73	0.00	181,000	6,540 g, i	<1,110 m	18,000	32,000	2,250	14,900	—	—	—	—	—	—	—	—	—
MW-8	01/10/08	451.31	8.16	443.15	0.00	202,000	9,190 c	<4,850 m	13,400	29,600	2,200	14,000	—	—	—	—	—	—	—	—	—
MW-8	07/10/08	451.31	8.14	443.18 d	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-8	08/26/08	451.31	8.30	443.03 d	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-8	09/22/08	451.31	8.80	442.52 d	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-8	01/06/09	451.31	7.90	443.41	0.00	22,000	6,900	440	2,700	6,300	390	4,300	—	—	—	—	—	—	—	—	—
MW-8	07/29/10	451.31	7.92	443.39	0.00	—	5,300 j	2,000 j	18,000	40,000	17,000	110,000	—	—	—	—	—	—	—	—	—
MW-9	07/09/07	451.75	10.83	440.92	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-9	07/28/07	451.75	11.02	440.73	0.00	<50.0	<248	<495	<0.500	<0.500	<0.500	<1.00	—	—	—	—	—	—	—	—	—
MW-9	10/01/07	451.75	14.07	437.68	0.00	299	174 f,g	<111	5.52	<1.00	<1.00	<3.00	—	—	—	—	—	—	—	—	—
MW-9	01/10/08	451.75	9.76	441.99	0.00	<50.0	<238	<476	<0.500	<0.500	<0.500	<3.00	—	—	—	—	—	—	—	—	—
MW-9	07/10/08	451.75	9.71	442.04	0.00	<50	<500	<1,000 m	<1	<1	<1	<1	—	—	—	—	—	—	—	—	—
MW-9	01/06/09	451.75	9.35	442.40	0.00	<100	<100	<100	<0.50	<1.0	<1.0	<1.0	—	—	—	—	—	—	—	—	—
MW-9	07/13/09	451.75	9.94	441.81	0.00	—	—	—	<0.50	<1.0	<1.0	<1.0	—	—	—	—	—	—	—	—	—
MW-9	07/29/10	451.75	9.80	441.95	0.00	—	<100	<100	<0.50	<1.0	<1.0	<1.0	—	—	—	—	—	—	—	—	—
MW-10	07/09/07	451.43	12.44	438.99	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-10	07/28/07	451.43	12.77	438.66	0.00	6,570	307 c	<505 m	299	179	237	615	—	—	—	—	—	—	—	—	—
MW-10	10/01/07	451.43	14.87	436.56	0.00	27,100	1,820 g, i	<556 m	1,510	1,220	1,210	2,650	—	—	—	—	—	—	—	—	—
MW-10	01/10/08	451.43	10.52	440.91	0.00	11,400	<248	<495	316	237	842	604	—	—	—	—	—	—	—	—	—
MW-10	07/10/08	451.43	11.69	439.74	0.00	1,400	<500	<1,000 m	1,400	1,200	710	2,310	—	—	—	—	—	—	—	—	—
MW-10	01/06/09	451.43	10.11	441.32	0.00	29,000	120	<100	4,800	1,400	1,800	5,100	—	—	—	—	—	—	—	—	—
MW-10*	07/13/09	451.43	12.31	439.12	0.00	4,800	<100	<100	1,600	260	190	1,000	—	—	—	—	—	—	—	—	—
MW-10	07/29/10	451.43	11.86	439.57	0.00	—	<100	<100	240	9.9	45	89	—	—	—	—	—	—	—	—	—
SB-3 n	05/10/10	—	—	—	0.00	360	1,600 j	<100	170	<1.0	<1.0	<1.0	—	—	—	—	—	—	—	—	—

SUMMARY OF GROUNDWATER MONITORING DATA
 FORMER JEFFY LUBE FACILITY
 6608 196TH STREET SOUTHWEST,
 LYNNWOOD, WASHINGTON

TABLE 1

Sample ID	Date	TOC	DTW	GWE	SPH				HYDROCARBONS					PRIMARY VOCs					LEAD				
					Thickness	TPHg	TPHd	TPHo	B	T	E	X	EDB	EDC	MTBE	TBA	DPE	ETBE	TAME	Total			
SB-4 n	05/10/10	--	--	--	0.00	180	2,400 j	<100	<0.5	<1.0	<1.0	<1.0	--	--	--	--	--	--	15				

Notes:

DTW = Depth to Water in feet
 GWE = Groundwater Elevation in feet above mean sea level
 TOC = Top of Casing in feet above mean sea level
 SPH = Separate Phase Hydrocarbons
 MTCa = Model Toxics Control Act
 All results in micrograms per liter (ug/L) unless otherwise indicated.
 TPHg = Total petroleum hydrocarbons as gasoline analyzed by NMTPH-GX unless otherwise noted. The higher value is based on the assumption that no benzene is present in the groundwater sample. If any detectable amount of benzene is present in the groundwater sample, then the lower TPHg cleanup level is applicable.
 TPHd = Total petroleum hydrocarbons as diesel, analyzed by NMTPH-DX with silica gel cleanup unless otherwise noted.
 TPHo = Total petroleum hydrocarbons as oil, analyzed by NMTPH-DX with silica gel cleanup unless otherwise noted.
 VOCs = Volatile organic compounds
 BTEX = Benzene, toluene, ethylbenzene, and xylenes analyzed by EPA Method 8260B unless otherwise noted.
 Xylenes = o-xylene + m,p-xylene
 MTBE = Methyl tertiary-butyl ether analyzed by EPA Method 8260B
 EDB = 1,2-Dibromoethane analyzed by EPA Method 8011
 EDC = 1,2-Dichloroethane analyzed by EPA Method 8260B
 TBA = Tertiary-butanol analyzed by EPA Method 8260B
 DPE = Di-isopropyl ether analyzed by EPA Method 8260B
 ETBE = Ethyl tertiary-butyl ether analyzed by EPA Method 8260B
 TAME = Tertiary-amyyl methyl ether analyzed by EPA Method 8260B
 Total Lead analyzed by EPA Method 6020 unless otherwise noted.
 <x = Not detected at laboratory reporting limit x
 NE = Not established
 -- = Not analyzed
 Concentrations in bold type indicate the analyte was detected above MTCa Method A cleanup levels

- a = Due to multiple re-shots required for re-analysis, the aliquot of sample analyzed on the instrument was taken from a VOA vial containing headspace.
- b = Sample container contained headspace
- c = Results reported in the diesel organics range are primarily due to overlap from a gasoline-range product.
- d = Groundwater elevation formula adjusted for the presence of SPH: (TOC - DTW) * (SPHTT-0.80)
- e = Hydrocarbon pattern most closely resembles a blend of gasoline and diesel.
- f = The primary contamination elutes between C8 and C9, which is in the diesel range.
- g = The contamination did not match any standard in our library.
- h = The primary contamination elutes between C8 and C14, which is in the mineral spirits range.
- i = The primary contamination elutes between C8 and C16, which is in the kerosene range.
- j = The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard.
- m = The laboratory reporting limit exceeded the MTCa Method A cleanup level.
- n = Grab groundwater sample taken from temporary well. Sample ID is abbreviated from GW-241739-051010-HB-(Unique ID).

* = Sample also analyzed for one or more of the following: carcinogenic polycyclic aromatic hydrocarbons (CPAHs) by EPA Method 8270C-SIM, polychlorinated biphenyls (PCBs) by EPA Method 8082, and halogenated volatile organic compounds (HVOCs) by EPA Method 8260B. For those constituents analyzed, no concentrations exceeded the laboratory MDL. Please see applicable laboratory report(s) for more information.

APPENDIX A
FIELD FORMS

Job Clearance Form

Station Address: 6808 196th Lynnwood	Work Order Number: 100729-92	Date: 7/29/10
Contractor Name: BPS	Contractor Phone: 256-6100	Contractor Email: [blank]
Problem/Work Description: SAMPLE 10 wells	Start Time: 12:00	End Time: 1:00
<input checked="" type="checkbox"/> SAFETY VEST <input type="checkbox"/> PROTECTIVE CLOTHING <input checked="" type="checkbox"/> HARD HAT <input checked="" type="checkbox"/> GLOVES <input checked="" type="checkbox"/> SHOES & BOOTS <input checked="" type="checkbox"/> SAFETY GLASSES/GOOGLES <input type="checkbox"/> HEARING PROTECTION <input type="checkbox"/> WELDING PPE <input checked="" type="checkbox"/> RESPIRATOR <input type="checkbox"/> OTHER	Return Call: yes / no Damage Claim: yes / no	
Work description in plain terms: [blank] Location: [blank]	Work in confined spaces (e.g. tank, basement or deep manhole only)? <input type="checkbox"/> Hot work with risk of sparks or molten metal? <input type="checkbox"/> Lifting or lowering of loads? <input type="checkbox"/> Use of power tools, equipment or machinery? <input type="checkbox"/> Excavation or trenching? <input type="checkbox"/> Work in or near live electrical equipment? <input type="checkbox"/> Work in or near high pressure systems? <input type="checkbox"/> Work in or near moving machinery? <input type="checkbox"/> Work in or near overhead power lines? <input type="checkbox"/> Work in or near traffic? <input type="checkbox"/> Work in or near other hazards? <input type="checkbox"/>	Signature: [blank] Date: [blank]
Work description in plain terms: [blank] Location: [blank]	Work in confined spaces (e.g. tank, basement or deep manhole only)? <input type="checkbox"/> Hot work with risk of sparks or molten metal? <input type="checkbox"/> Lifting or lowering of loads? <input type="checkbox"/> Use of power tools, equipment or machinery? <input type="checkbox"/> Excavation or trenching? <input type="checkbox"/> Work in or near live electrical equipment? <input type="checkbox"/> Work in or near high pressure systems? <input type="checkbox"/> Work in or near moving machinery? <input type="checkbox"/> Work in or near overhead power lines? <input type="checkbox"/> Work in or near traffic? <input type="checkbox"/> Work in or near other hazards? <input type="checkbox"/>	Signature: [blank] Date: [blank]
Work description in plain terms: [blank] Location: [blank]	Work in confined spaces (e.g. tank, basement or deep manhole only)? <input type="checkbox"/> Hot work with risk of sparks or molten metal? <input type="checkbox"/> Lifting or lowering of loads? <input type="checkbox"/> Use of power tools, equipment or machinery? <input type="checkbox"/> Excavation or trenching? <input type="checkbox"/> Work in or near live electrical equipment? <input type="checkbox"/> Work in or near high pressure systems? <input type="checkbox"/> Work in or near moving machinery? <input type="checkbox"/> Work in or near overhead power lines? <input type="checkbox"/> Work in or near traffic? <input type="checkbox"/> Work in or near other hazards? <input type="checkbox"/>	Signature: [blank] Date: [blank]

The contractor through its authorized representative shall sign, issue and be solely responsible for all job clearance forms and the obligations arising thereunder applicable to the work. The form covers important work areas and is not intended to release the contractor from liability for performing the work in compliance with all applicable laws and regulations. The Site Representative may require the contractor to stop work if it appears that the contractor or any of its workers are failing to comply with the requirements of the applicable terms of the form or other applicable safety requirements.

Shell Oil Products Chain Of Custody Record



LAB (LOCATION)

- CASCIENCE
- SFL Houston
- XENCO
- TEST AMERICA
- OTHER

Please Check Appropriate Box

- ENV SERVICES
- MOTIVA RETAIL
- MOTIVA SDACH
- SHELL PIPELINE
- SHELL RETAIL
- CONSULTANT
- OTHER
- LUBES

Print Bill To Contact Name

Jeff Cloud - 241739

PO #

4 0 1 9 8 9 0

INCIDENT # (ENV SERVICES)

9 7 6 0 5 4 1 0

SAP #

1 7 1 1 5 2

CHECK IF NO INCIDENT APPLIES

DATE: 7/29/10

PAGE: 1 of 1

Blaine Tech Services

1680 Rogers Avenues, San Jose, Ca

PROJECT CONTACT (Please type name & phone #)

Dan Koskela - Copy to shell.lab.billing@craworld.com

PHONE 916-925-2913x101 FAX 916-925-2891

EMAIL dkoskela@blainetech.com

STATE ADDRESS STATE AND CITY

WA Lynnwood

6808 196th Street SW, Lynnwood

425-212-5100

Christine Schweigert, CRA, Everett

christineschweigert@CRAworld.com

CONTRACT PRODUCT NO: 10032252

241739-2009-2

CLIENT'S ONLY

TURNAROUND TIME (CALENDAR DAYS)

STANDARD (14 DAY) 5 DAYS 3 DAYS 2 DAYS

LA - RWQCS REPORT FORMAT

LAST AGENCY

RESULTS NEEDED ON WEEKEND

SHELL CONTRACT RATE APPLIES

STATE REIMBURSEMENT RATE APPLIES

DDO NOT NEEDED

ACCEPT VERIFICATION REQUESTED

SPECIAL INSTRUCTIONS OR NOTES:

Please send an additional copy of Lab Results to: shell.lab.billing@craworld.com

See Cascience PM for WA Dept. of Ecology MTCA Method A cleanup levels for minimum detection limits

REQUESTED ANALYSIS

NWTPH-Ox	
NWTPH-Dx w/Silica Gel Cleanup	
BTEX (826B)	
5 Oxygenates, MTBE, TBA, DIBP, TAME, ETBE (826B)	
EDB, EDC (826B)	
Total Lead (6020)	
PCBs (8082)	
PAHs (8070 SIM)	
VOCs Full list (826B)	
Pest (8090)	
NWTPH-VPH	
NWTPH-EPH	
n-Hexane (9071B)	

TEMPERATURE ON RECEIPT °C

Container PID Readings or Laboratory Notes

Field Sample Identification	SAMPLING			PRESERVATIVE			NO. OF CONT.
	DATE	TIME	MATRIX	HCL	HNO3	H2SO4	
MW-6	7/29/10	12:10	W	X	X	X	5
MW-7	7/29/10	12:20	W	X	X	X	5
MW-2	7/29/10	12:45	W	X	X	X	5
MW-10	7/29/10	13:00	W	X	X	X	5
MW-9	7/29/10	13:10	W	X	X	X	5
MW-8	7/29/10	13:25	W	X	X	X	5

TEMPERATURE ON RECEIPT °C

Container PID Readings or Laboratory Notes

Received by: (Signature) *S. Lane*

Received by: (Signature) *Fed Ex*

Received by: (Signature)

Date: 7/29/10

Time: 1700

DATE: 7/29/10

PAGE: 1 of 1

WELLHEAD INSPECTION FORM

Client: Shell Site: 97605410 Date: 7/29/10
 Job #: 100729-GLZ Technician: SL Page: 1 of 1

Well ID	Well Inspected - No Corrective Action Required	Check Indicates deficiency										Well Not Inspected (explain in notes)	Notes <small>(list if cap or lock replaced, if there are access issues associated with repairs, if traffic control is required, if stand pipe damaged, or any specific details not covered by checklist)</small>		
		Cap non-functional	Lock non-functional	Lock missing	Bolts missing (list qty.)	Tabs stripped (list qty.)	Tabs broken (list qty.)	Annular seal incomplete	Apron damaged	Rim / Lid broken	Trip Hazard			Below Grade	Other (explain in notes)
MW-1	X														
MW-2	X														labeled MW-3
MW-3	X														labeled MW-2
MW-4	X														
MW-5	X														
MW-6	X														
MW-7	X														
MW-8	X														
MW-9	X														
MW-10	X														

Notes: _____

SPH or Purge Water Drum Log

Client:

Shell

Site Address:

6808 196th SW LYNWOOD

STATUS OF DRUM(S) UPON ARRIVAL						
Date	<i>7/29/10</i>					
Number of drum(s) empty:						
Number of drum(s) 1/4 full:						
Number of drum(s) 1/2 full:						
Number of drum(s) 3/4 full:						
Number of drum(s) full:						
Total drum(s) on site:	<i>0</i>					
Are the drum(s) properly labeled?						
Drum ID & Contents:						
If any drum(s) are partially or totally filled, what is the first use date:						

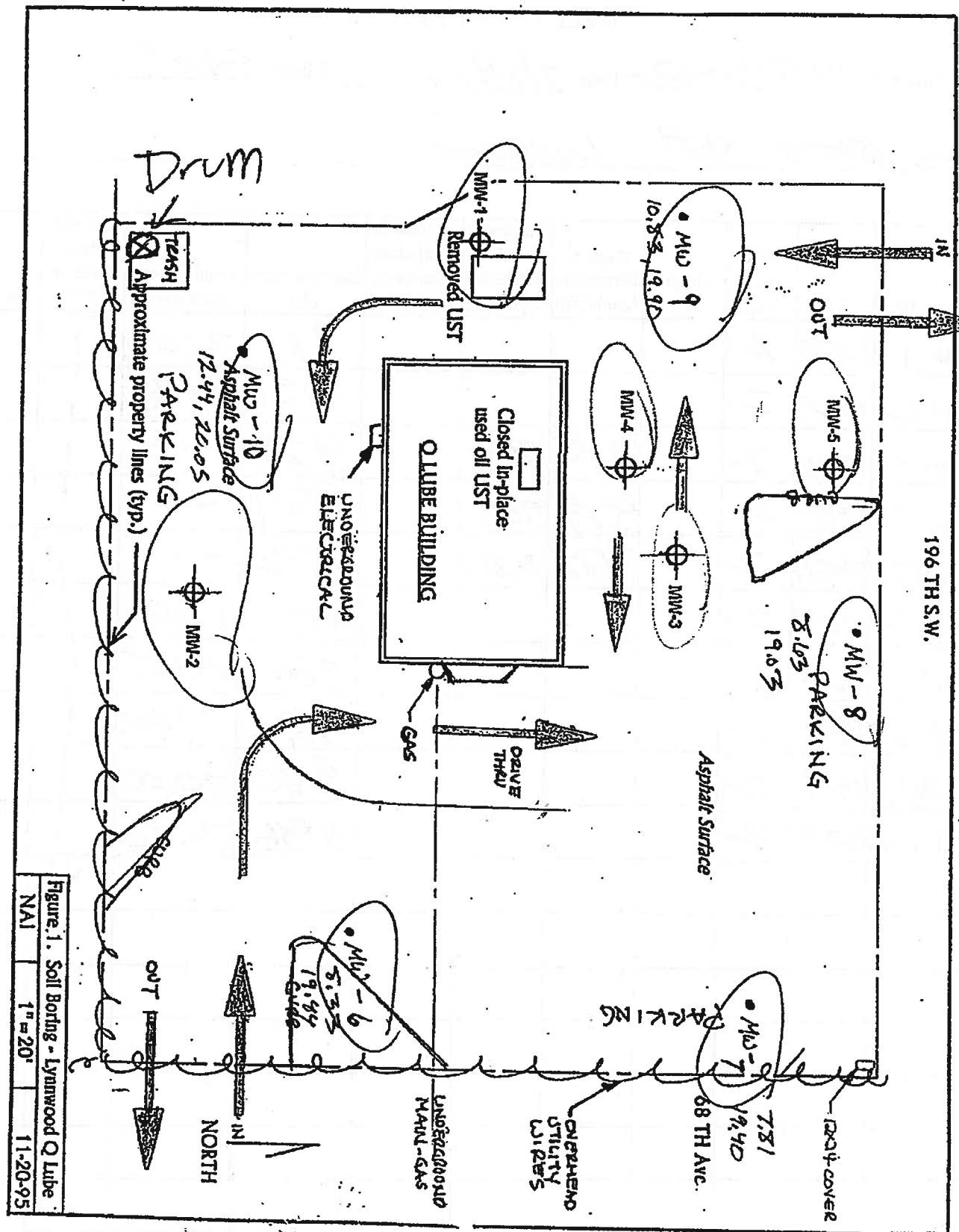
- If you add any SPH to an empty or partially filled drum, drum must have at least 20 gals. of Purgewater or DI Water.
- If drum contains SPH, the drum MUST be steel AND labeled with the appropriate label.
- All BTS drums MUST be labeled appropriately.

STATUS OF DRUM(S) UPON DEPARTURE						
Date	<i>7/29/10</i>					
Number of drums empty:						
Number of drum(s) 1/4 full:	<i>1</i>					
Number of drum(s) 1/2 full:						
Number of drum(s) 3/4 full:						
Number of drum(s) full:						
Total drum(s) on site:	<i>1</i>					
Are the drum(s) properly labeled?	<i>yes</i>					
Drum ID & Contents:	<i>SPH + PWS</i>					

LOCATION OF DRUM(S)

Describe location of drum(s): *In trash compound see map*

FINAL STATUS						
Number of new drum(s) left on site this event	<i>1</i>					
Date of inspection:	<i>7/29/10</i>					
Drum(s) labelled properly:	<i>yes</i>					
Logged by BTS Field Tech:	<i>GL</i>					
Office reviewed by:						



WELL GAUGING DATA

Project # 100729-512 Date 7/29/10 Client Shell

Site 6808 196th, LYNNWOOD

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or <u>TOC</u>	Notes
MW-1	1250	2					11.10	25.00	↓	
MW-2	1225	2					10.31	17.40		
MW-3	1330	2		9.18	0.03		9.21	—		
MW-4	1340	2		9.79	0.02		9.81	—		
MW-5	1350	2		8.52	0.20		8.72	—		
MW-6	1203	2					8.17	19.40		
MW-7	1215	2					7.69	19.45		
MW-8	1317	2					7.92	19.45		
MW-9	1304	2					9.80	20.00		
MW-10	1229	2					11.86	20.12		

SHELL WELL MONITORING DATA SHEET

BTS #: <u>100729-GLZ</u>	Site: <u>97605410</u>
Sampler: <u>GL</u>	Date: <u>7/29/10</u>
Well I.D.: <u>MW-1</u>	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): <u>25.00</u>	Depth to Water (DTW): <u>11.10</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: ~~Bailer~~ ~~Disposable Bailer~~ ~~Middleburg~~ ~~Electric Submersible~~ ~~Waterra~~ ~~Peristaltic~~ ~~Extraction Pump~~ Other _____

Sampling Method: ~~Bailer~~ ~~Disposable Bailer~~ ~~Extraction Port~~ ~~Dedicated Tubing~~ Other: _____

	(Gals.) X		=		Gals.
I Case Volume	Specified Volumes	Calculated Volume			

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or μ S)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1300</u>	<u>61.7</u>	<u>6.66</u>	<u>589</u>	<u>32</u>		

Did well dewater? Yes No Gallons actually evacuated: _____

Sampling Date: 7/29/10 Sampling Time: 1300 Depth to Water: _____

Sample I.D.: MW-1 Laboratory: Calscience Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See SOW

EB I.D. (if applicable): @ _____ Time Duplicate I.D. (if applicable): _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____

D.O. (if req'd): Pre-purge: _____ mg/L	Post-purge: _____ mg/L
O.R.P. (if req'd): Pre-purge: _____ mV	Post-purge: _____ mV

SHELL WELL MONITORING DATA SHEET

BTS #: <u>100729-5L2</u>	Site: <u>97605410</u>
Sampler: <u>GL</u>	Date: <u>7/29/10</u>
Well I.D.: <u>MW-2</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth (TD): <u>17.40</u>	Depth to Water (DTW): <u>10.31</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: ~~Bailer~~
~~Disposable Bailer~~
~~Middleburg~~
~~Electric Submersible~~

Water
 Peristaltic
 Extraction Pump
 Other _____

Sampling Method: ~~Bailer~~
~~Disposable Bailer~~
 Extraction Port
 Dedicated Tubing

Other: _____

_____ (Gals.) X _____ = _____ Gals. I Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F)	pH	Cond. (mS or μ S)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1235</u>	<u>61.7</u>	<u>6.51</u>	<u>685</u>	<u>621</u>		

Did well dewater? Yes No Gallons actually evacuated: _____

Sampling Date: 7/29/10 Sampling Time: 1235 Depth to Water: _____

Sample I.D.: MW-2 Laboratory: (Calscience) Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See SOW

EB I.D. (if applicable): _____ @ _____ Time Duplicate I.D. (if applicable): _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

SHELL WELL MONITORING DATA SHEET

BTS #: <u>100729-512</u>	Site: <u>97605410</u>
Sampler: <u>GL</u>	Date: <u>7/29/10</u>
Well I.D.: <u>MW-3</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth (TD): <u>—</u>	Depth to Water (DTW): <u>9.21</u>
Depth to Free Product: <u>9.18</u>	Thickness of Free Product (feet): <u>0.03</u>
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: ~~Bailer~~
~~Disposable Bailer~~
~~Middleburg~~
~~Electric Submersible~~

Water
~~Peristaltic~~
~~Extraction Pump~~
 Other: _____

Sampling Method: ~~Bailer~~
~~Disposable Bailer~~
~~Extraction Port~~
~~Dedicated Tubing~~

Other: _____

	(Gals.) X _____ = _____ Gals.		
1 Case Volume	Specified Volumes	Calculated Volume	

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
						<u>Removed ~ 10mL SPH + 1/2 gal H₂O</u>

Did well dewater? Yes No Gallons actually evacuated: _____

Sampling Date: 7/29/10 Sampling Time: _____ Depth to Water: _____

Sample I.D.: MW-3 Laboratory: Calscience Other: _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See SOW

EB I.D. (if applicable): _____ @ _____ Time Duplicate I.D. (if applicable): _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

SHELL WELL MONITORING DATA SHEET

BTS #: <u>100729-GLZ</u>	Site: <u>97605410</u>
Sampler: <u>GL</u>	Date: <u>7/29/10</u>
Well I.D.: <u>MW-4</u>	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): <u> </u>	Depth to Water (DTW): <u>9.81</u>
Depth to Free Product: <u>9.79</u>	Thickness of Free Product (feet): <u>0.02</u>
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: ~~Bailer~~
~~Disposable Bailer~~
~~Middleburg~~
~~Electric Submersible~~

~~Water~~
~~Peristaltic~~
~~Extraction Pump~~
 Other _____

Sampling Method: ~~Bailer~~
~~Disposable Bailer~~
~~Extraction Port~~
 Dedicated Tubing

Other: _____

_____ (Gals.) X _____ = _____ Gals.	
1 Case Volume	Specified Volumes
	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
						<u>Removed ~ 30ML SPH + 1/2 gal H₂O</u>

Did well dewater? ~~Yes~~ No Gallons actually evacuated: _____

Sampling Date: 7/29/10 Sampling Time: _____ Depth to Water: _____

Sample I.D.: MW- Laboratory: Calscience Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See SOW

EB I.D. (if applicable): _____ @ _____ Time Duplicate I.D. (if applicable): _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____

D.O. (if req'd):	Pre-purge:		mg/L	Post-purge:		mg/L
O.R.P. (if req'd):	Pre-purge:		mV	Post-purge:		mV

SHELL WELL MONITORING DATA SHEET

BTS #: <u>100729-SLZ</u>	Site: <u>97605410</u>
Sampler: <u>SL</u>	Date: <u>7/29/10</u>
Well I.D.: <u>MW-7</u>	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): <u>19.45</u>	Depth to Water (DTW): <u>7.69</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: ~~Bailer~~
~~Disposable Bailer~~
~~Middleburg~~
~~Electric Submersible~~

Water
~~Peristaltic~~
~~Extraction Pump~~
 Other _____

Sampling Method: ~~Bailer~~
~~Disposable Bailer~~
~~Extraction Port~~
~~Dedicated Tubing~~

Other: _____

(Gals.) X _____ = _____ Gals.						
1 Case Volume	Specified Volumes	Calculated Volume	Well Diameter	Multiplier	Well Diameter	Multiplier
			1"	0.04	4"	0.65
			2"	0.16	6"	1.47
			3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1220</u>	<u>62.7</u>	<u>6.18</u>	<u>464</u>	<u>71000</u>		

Did well dewater? Yes No Gallons actually evacuated: _____

Sampling Date: 7/29/10 Sampling Time: 1220 Depth to Water: _____

Sample I.D.: MW-7 Laboratory: Calscience Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See SOW

EB I.D. (if applicable): @ _____ Time Duplicate I.D. (if applicable): _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____

D.O. (if req'd): Pre-purge:		mg/L	Post-purge:		mg/L
O.R.P. (if req'd): Pre-purge:		mV	Post-purge:		mV

SHELL WELL MONITORING DATA SHEET

BTS #: <u>100729-GLZ</u>	Site: <u>97605410</u>
Sampler: <u>GL</u>	Date: <u>7/29/10</u>
Well I.D.: <u>MW-8</u>	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): <u>19.45</u>	Depth to Water (DTW): <u>7.92</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: ~~Bailer~~
~~Disposable Bailer~~
~~Middleburg~~
~~Electric Submersible~~

Water
 Peristaltic
 Extraction Pump
 Other _____

Sampling Method: ~~Bailer~~
~~Disposable Bailer~~
 Extraction Port
 Dedicated Tubing

Other: _____

_____ (Gals.) X _____ = _____ Gals. I Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1325</u>	<u>66.9</u>	<u>6.37</u>	<u>465</u>	<u>>1000</u>		<u>Odor, Sheen</u>

Did well dewater? Yes No Gallons actually evacuated: _____

Sampling Date: 7/29/10 Sampling Time: 1325 Depth to Water: _____

Sample I.D.: MW-8 Laboratory: Calscience Other: _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See SOW

EB I.D. (if applicable): _____ @ _____ Time Duplicate I.D. (if applicable): _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

SHELL WELL MONITORING DATA SHEET

BTS #: <u>100729-512</u>	Site: <u>97605410</u>
Sampler: <u>GL</u>	Date: <u>7/29/10</u>
Well I.D.: <u>MW-5</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth (TD): <u>—</u>	Depth to Water (DTW): <u>8.72</u>
Depth to Free Product: <u>8.52</u>	Thickness of Free Product (feet): <u>0.20</u>
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: ~~Bailer~~
~~Disposable Bailer~~
~~Middleburg~~
~~Electric Submersible~~

Waters
Peristaltic
Extraction Pump
Other _____

Sampling Method: ~~Bailer~~
~~Disposable Bailer~~
Extraction Port
Dedicated Tubing

Other: _____

(Gals.) X _____ = _____ Gals.						
1 Case Volume	Specified Volumes	Calculated Volume	Well Diameter	Multiplier	Well Diameter	Multiplier
			1"	0.04	4"	0.65
			2"	0.16	6"	1.47
			3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
						<u>REMOVED ~ 25ml SPH + 1 gal H₂O</u>

Did well dewater? Yes No Gallons actually evacuated: _____

Sampling Date: 7/29/10 Sampling Time: _____ Depth to Water: _____

Sample I.D.: MW- Laboratory: Calscience Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See SOW

EB I.D. (if applicable): @ _____ Time Duplicate I.D. (if applicable): _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____

D.O. (if req'd): Pre-purge:		Post-purge:	
O.R.P. (if req'd): Pre-purge:		Post-purge:	

SHELL WELL MONITORING DATA SHEET

BTS #: <u>100729-SLZ</u>	Site: <u>97605410</u>
Sampler: <u>SL</u>	Date: <u>7/29/10</u>
Well I.D.: <u>MW-6</u>	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): <u>19.40</u>	Depth to Water (DTW): <u>8.17</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer Disposable Bailer Middleburg Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____
---	---	---

(Gals.) X _____ = _____ Gals. 1 Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F)	pH	Cond. (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
1210	67.4	6.06	497	>1000		

Did well dewater? Yes No	Gallons actually evacuated:
Sampling Date: <u>7/29/10</u>	Sampling Time: <u>1210</u> Depth to Water:
Sample I.D.: <u>MW-6</u>	Laboratory: <u>Calscience</u> Other _____
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See SOW
EB I.D. (if applicable): @ _____	Duplicate I.D. (if applicable):
Analyzed for: TPH-G BTEX MTBE TPH-D	Other:
D.O. (if req'd): Pre-purge: _____ mg/L	Post-purge: _____ mg/L
O.R.P. (if req'd): Pre-purge: _____ mV	Post-purge: _____ mV

SHELL WELL MONITORING DATA SHEET

BTS #: <u>100729-SLZ</u>	Site: <u>97605410</u>
Sampler: <u>GL</u>	Date: <u>7/29/10</u>
Well I.D.: <u>MW-9</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth (TD): <u>20.00</u>	Depth to Water (DTW): <u>9.80</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: ~~Bailer~~
~~Disposable Bailer~~
~~Middleburg~~
~~Electric Submersible~~

~~Water~~
~~Peristaltic~~
~~Extraction Pump~~
 Other: _____

Sampling Method: ~~Bailer~~
~~Disposable Bailer~~
~~Extraction Port~~
~~Dedicated Tubing~~
 Other: _____

(Gals.) X _____	= _____	Gals.
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or <u>μS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1310</u>	<u>64.2</u>	<u>6.02</u>	<u>249</u>	<u>23</u>		

Did well dewater? Yes No Gallons actually evacuated: _____

Sampling Date: 7/29/10 Sampling Time: 1310 Depth to Water: _____

Sample I.D.: MW-9 Laboratory: (Calscience) Other: _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See SOW

EB I.D. (if applicable): _____ @ _____ Time Duplicate I.D. (if applicable): _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____

D.O. (if req'd): Pre-purge: _____ mg/L	Post-purge: _____ mg/L
O.R.P. (if req'd): Pre-purge: _____ mV	Post-purge: _____ mV

SHELL WELL MONITORING DATA SHEET

BTS #: <u>100729-SLZ</u>	Site: <u>97605410</u>
Sampler: <u>GL</u>	Date: <u>7/29/10</u>
Well I.D.: <u>MW-10</u>	Well Diameter: <u>2</u> 3 4 6 8 _____
Total Well Depth (TD): <u>20.12</u>	Depth to Water (DTW): <u>11.86</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: ~~Bailer~~
~~Disposable Bailer~~
~~Middleburg~~
~~Electric Submersible~~

Water
~~Peristaltic~~
~~Extraction Pump~~
 Other _____

Sampling Method: ~~Bailer~~
~~Disposable Bailer~~
~~Extraction Port~~
 Dedicated Tubing

Other: _____

_____ (Gals.) X _____ = _____ Gals. 1 Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F)	pH	Cond. (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1245</u>	<u>60.8</u>	<u>6.25</u>	<u>709</u>	<u>71000</u>		

Did well dewater? Yes No Gallons actually evacuated: _____

Sampling Date: 7/29/10 Sampling Time: 1245 Depth to Water: _____

Sample I.D.: MW-10 Laboratory: Calscience Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See SOW

EB I.D. (if applicable): @ _____ Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____

D.O. (if req'd):	Pre-purge:	_____ mg/L	Post-purge:	_____ mg/L
O.R.P. (if req'd):	Pre-purge:	_____ mV	Post-purge:	_____ mV

Job Clearance Form

Student #	Student Address: 6808 19th St NW, Lynnwood, WA 98037	Work Order Number: 100827-54	Date: 8/27/07
Contractor Name (if any)	Contractor Address: PT's S. Cane 1	Start Time: 8:00 AM	Event Date: 8/27/07
Problem/Work Description: Gauge & BZ. STH			
<input checked="" type="checkbox"/> SAFETY VEST <input checked="" type="checkbox"/> HARD HAT <input checked="" type="checkbox"/> SHOES & BOOTS <input type="checkbox"/> PROTECTIVE CLOTHING <input checked="" type="checkbox"/> GLOVES <input checked="" type="checkbox"/> SAFETY GLASSES/GOGGLES <input type="checkbox"/> HEARING PROTECTION <input type="checkbox"/> RESPIRATOR <input type="checkbox"/> WELDING PIPE <input type="checkbox"/> OTHER			
Return Out: yes / no Damage Claim: yes / no			
Work done under a permit? <input type="checkbox"/> Permit No. 100827-54 <input type="checkbox"/> No permit required			
Examples of Hazards/Injuries:			
Work in confined spaces (e.g., tank, bin, silo, or deep manhole entry) <input type="checkbox"/>			
Hot work activities (e.g., welding, brazing, or hot metal entry) <input type="checkbox"/>			
LPE areas (e.g., trenching, backfilling, or trenching) <input type="checkbox"/>			
This form must be completed for each job and updated and re-approved if circumstances change or if additional hazards are identified.			
SIGN III		SIGN OUT	
Contracting status: Is it approved by the Representative only? <input type="checkbox"/>	Contractor Representative Signature: S. Cane	Contractor Representative Signature: S. Cane	Contractor Representative Signature: S. Cane
GENERAL SAFETY CHECKS	Other: coffee	Other: coffee	Other: coffee
• How do the personal items fit?			
• Has the delivery service been reviewed?			
• Has the delivery service been reviewed?			
• Are work areas confined off to prevent others from entering the work area?			
• Other:			

The contractor through its authorized representative shall sign, attest and be solely responsible for all job clearance forms and the signifier is signing form under applicable to the work. The form covers important matters and is not to be used to reflect the contractor's compliance with the applicable laws and regulations. The Site Representative requires the contractor to stop work until approval has been received for any other applicable safety requirements.

WELLHEAD INSPECTION FORM

Client: Shell Site: 97605410 Date 8/27/10
Job #: 100827-GL Technician: GL Page 1 of 1

Well ID	Well Inspected - No Corrective Action Required	Check indicates deficiency											Well Not Inspected (explain in notes)	Notes (list if cap or lock replaced, if there are access issues associated with repairs, if traffic control is required, if stand pipe damaged, or any specific details not covered by checklist)			
		Cap non-functional	Lock non-functional	Lock missing	Bolts missing (list qty.)	Tabs stripped (list qty.)	Tabs broken (list qty.)	Annular seal incomplete	Apron damaged	Rim / Lid broken	Trip Hazard	Below Grade			Other (explain in notes)		
MW-3	X																labeled MW-2
MW-4	X																
MW-5	X																

Notes: _____

SPH or Purge Water Drum Log

Client: Shell
 Site Address: 6808 196th SW LYNNWOOD

STATUS OF DRUM(S) UPON ARRIVAL

Date	7/29/10	8/27/10			
Number of drum(s) empty:					
Number of drum(s) 1/4 full:					
Number of drum(s) 1/2 full:					
Number of drum(s) 3/4 full:					
Number of drum(s) full:					
Total drum(s) on site:	0	1			
Are the drum(s) properly labeled?		YES			
Drum ID & Contents:		SPH + Purge water			
If any drum(s) are partially or totally filled, what is the first use date:		7/29/10			

- If you add any SPH to an empty or partially filled drum, drum must have at least 20 gals. of Purgewater or DI Water.
- If drum contains SPH, the drum MUST be steel AND labeled with the appropriate label.
- All BTS drums MUST be labeled appropriately.

STATUS OF DRUM(S) UPON DEPARTURE

Date	7/29/10	8/27/10			
Number of drums empty:					
Number of drum(s) 1/4 full:	1	1			
Number of drum(s) 1/2 full:					
Number of drum(s) 3/4 full:					
Number of drum(s) full:					
Total drum(s) on site:	1	1			
Are the drum(s) properly labeled?	yes	yes			
Drum ID & Contents:	SPH + Purge water →				

LOCATION OF DRUM(S)

Describe location of drum(s): In trash compound
see map

FINAL STATUS

Number of new drum(s) left on site this event	1	0			
Date of inspection:	7/29/10	8/27/10			
Drum(s) labelled properly:	yes	Y			
Logged by BTS Field Tech:	GL	GL			
Office reviewed by:					

WELL GAUGING DATA

Project # 100827-51 Date 8/27/10 Client Shell

Site 6808 195th, LYNNWOOD

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-3	0800	2	✓	10.06	0.10		10.16	—	↓	
MW-4	0810	2	✓	10.73	0.06		10.79	—		
MW-5	0817	2	✓	9.42	0.33		9.75	—		

SHELL WELL MONITORING DATA SHEET

BTS #: <u>100827-5L1</u>	Site: <u>97605410</u>
Sampler: <u>GL</u>	Date: <u>8/27/10</u>
Well I.D.: <u>MW-3</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth (TD): <u>10.06</u> ⁽²⁾	Depth to Water (DTW): <u>10.16</u>
Depth to Free Product: <u>10.06</u>	Thickness of Free Product (feet): <u>0.10</u>
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer Disposable Bailer Middleburg Electric Submersible

Waters Peristaltic Extraction Pump Other _____

Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other _____

_____ (Gals.) X _____ = _____ Gals.	<table border="1" style="font-size: small;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														
1 Case Volume	Specified Volumes Calculated Volume																

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
						<u>Removed ~ 20ml SPH + 1/2 gal H₂O</u>

Did well dewater? Yes No Gallons actually evacuated: _____

Sampling Date: _____ Sampling Time: _____ Depth to Water: _____

Sample I.D.: _____ Laboratory: Calscience Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See SOW

EB I.D. (if applicable): _____ @ _____ Time Duplicate I.D. (if applicable): _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

SHELL WELL MONITORING DATA SHEET

BTS #: <u>100827-5L1</u>	Site: <u>97605410</u>
Sampler: <u>SL</u>	Date: <u>8/27/10</u>
Well I.D.: <u>MW-4</u>	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): <u>—</u>	Depth to Water (DTW): <u>10.79</u>
Depth to Free Product: <u>10.73</u>	Thickness of Free Product (feet): <u>0.06</u>
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailor Disposable Bailor Middleburg Electric Submersible

Waters Peristaltic Extraction Pump Other _____

Sampling Method: Bailor Disposable Bailor Extraction Port Dedicated Tubing

Other: _____

_____ (Gals.) X _____ = _____ Gals.						
I Case Volume	Specified Volumes	Calculated Volume	Well Diameter	Multiplier	Well Diameter	Multiplier
			1"	0.04	4"	0.65
			2"	0.16	6"	1.47
			3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations

Did well dewater? Yes No Gallons actually evacuated: _____

Sampling Date: _____ Sampling Time: _____ Depth to Water: _____

Sample I.D.: _____ Laboratory: Calscience Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See SOW

EB I.D. (if applicable): @ _____ Time Duplicate I.D. (if applicable): _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

SHELL WELL MONITORING DATA SHEET

BTS #: <u>100827-5L1</u>	Site: <u>97605410</u>
Sampler: <u>GL</u>	Date: <u>8/27/10</u>
Well I.D.: <u>MW-5</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth (TD): <u> </u>	Depth to Water (DTW): <u>9.75</u>
Depth to Free Product: <u>9.42</u>	Thickness of Free Product (feet): <u>0.33</u>
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer Disposable Bailer Waterra Sampling Methods: Bailer
 Middleburg Peristaltic Disposable Bailer
 Electric Submersible Extraction Pump Extraction Port
 Other _____ Dedicated Tubing

_____ (Gals.) X _____ = _____ Gals. 1 Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations

Did well dewater? Yes No Gallons actually evacuated: _____

Sampling Date: _____ Sampling Time: _____ Depth to Water: _____

Sample I.D.: _____ Laboratory: Calscience Other _____

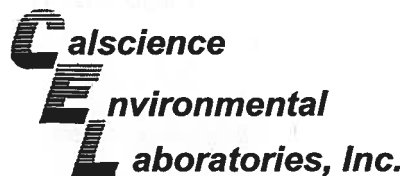
Analyzed for: TPH-G BTEX MTBE TPH-D Other: See SOW

EB I.D. (if applicable): _____ @ _____ Time Duplicate I.D. (if applicable): _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

APPENDIX B
LABORATORY ANALYTICAL REPORT



August 10, 2010

Dan Koskela
Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

Subject: **Calscience Work Order No.: 10-07-2297**
Client Reference: **6808 196th Street SW, Lynnwood, WA**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 7/30/2010 and analyzed in accordance with the attached chain-of-custody.

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Xuan H. Dang
Project Manager

Analytical Report

 Blaine Tech Services, Inc.
 1680 Rogers Avenue
 San Jose, CA 95112-1105

 Date Received: 07/30/10
 Work Order No: 10-07-2297
 Preparation: EPA 3510C
 Method: NWTPH-Dx
 Units: ug/L

Project: 6808 196th Street SW, Lynnwood, WA

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-6	10-07-2297-1-D	07/29/10 12:10	Aqueous	GC 43	07/30/10	08/04/10 04:32	100730B16S

Comment(s): -The sample extract was subjected to Silica Gel treatment prior to analysis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
TPH as Diesel Range	ND	100	1		TPH as Motor Oil Range	190	100	1	
Surrogates:	REC (%)	Control Limits	Qual						
Decachlorobiphenyl	101	68-140							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-7	10-07-2297-2-D	07/29/10 12:20	Aqueous	GC 43	07/30/10	08/04/10 04:52	100730B16S

Comment(s): -The sample extract was subjected to Silica Gel treatment prior to analysis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
TPH as Diesel Range	ND	100	1		TPH as Motor Oil Range	ND	100	1	
Surrogates:	REC (%)	Control Limits	Qual						
Decachlorobiphenyl	98	68-140							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-2	10-07-2297-3-D	07/29/10 12:35	Aqueous	GC 43	07/30/10	08/04/10 05:12	100730B16S

Comment(s): -The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard.

Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.

-The sample extract was subjected to Silica Gel treatment prior to analysis.

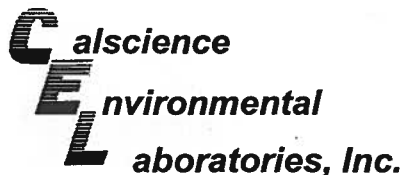
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
TPH as Diesel Range	200	100	1		TPH as Motor Oil Range	ND	100	1	
Surrogates:	REC (%)	Control Limits	Qual						
Decachlorobiphenyl	100	68-140							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-10	10-07-2297-4-D	07/29/10 12:45	Aqueous	GC 43	07/30/10	08/04/10 05:32	100730B16S

Comment(s): -The sample extract was subjected to Silica Gel treatment prior to analysis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
TPH as Diesel Range	ND	100	1		TPH as Motor Oil Range	ND	100	1	
Surrogates:	REC (%)	Control Limits	Qual						
Decachlorobiphenyl	93	68-140							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

Date Received: 07/30/10
Work Order No: 10-07-2297
Preparation: EPA 3510C
Method: NWTPH-Dx
Units: ug/L

Project: 6808 196th Street SW, Lynnwood, WA

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-1	10-07-2297-5-D	07/29/10 13:00	Aqueous	GC 43	07/30/10	08/04/10 05:52	100730B16S

Comment(s): -The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.
-The sample extract was subjected to Silica Gel treatment prior to analysis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
TPH as Diesel Range	320	100	1		TPH as Motor Oil Range	110	100	1	
Surrogates:	REC (%)	Control Limits	Qual						
Decachlorobiphenyl	103	68-140							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-9	10-07-2297-6-D	07/29/10 13:10	Aqueous	GC 43	07/30/10	08/04/10 06:12	100730B16S

Comment(s): -The sample extract was subjected to Silica Gel treatment prior to analysis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
TPH as Diesel Range	ND	100	1		TPH as Motor Oil Range	ND	100	1	
Surrogates:	REC (%)	Control Limits	Qual						
Decachlorobiphenyl	87	68-140							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-8	10-07-2297-7-D	07/29/10 13:25	Aqueous	GC 43	07/30/10	08/04/10 06:32	100730B16S

Comment(s): -The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.
-The sample extract was subjected to Silica Gel treatment prior to analysis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
TPH as Diesel Range	5300	100	1		TPH as Motor Oil Range	2000	100	1	
Surrogates:	REC (%)	Control Limits	Qual						
Decachlorobiphenyl	96	68-140							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-840-256	N/A	Aqueous	GC 43	07/30/10	08/04/10 03:31	100730B16S

Parameter	Result	RL	DF	Qual
TPH as Diesel Range	ND	100	1	
Surrogates:	REC (%)	Control Limits	Qual	
Decachlorobiphenyl	96	68-140		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Blaine Tech Services, Inc.
 1680 Rogers Avenue
 San Jose, CA 95112-1105

Date Received: 07/30/10
 Work Order No: 10-07-2297
 Preparation: EPA 5030B
 Method: EPA 8260B
 Units: ug/L

Project: 6808 196th Street SW, Lynnwood, WA

Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-6	10-07-2297-1-C	07/29/10 12:10	Aqueous	GC/MS JJ	08/05/10	08/05/10 15:17	100805L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Toluene	ND	1.0	1	
Ethylbenzene	ND	1.0	1		Xylenes (total)	ND	1.0	1	
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
Dibromofluoromethane	113	80-126			1,2-Dichloroethane-d4	110	80-131		
Toluene-d8	98	80-120			1,4-Bromofluorobenzene	86	80-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-7	10-07-2297-2-C	07/29/10 12:20	Aqueous	GC/MS JJ	08/05/10	08/05/10 17:23	100805L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Toluene	ND	1.0	1	
Ethylbenzene	ND	1.0	1		Xylenes (total)	ND	1.0	1	
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
Dibromofluoromethane	107	80-126			1,2-Dichloroethane-d4	109	80-131		
Toluene-d8	95	80-120			1,4-Bromofluorobenzene	86	80-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-2	10-07-2297-3-C	07/29/10 12:35	Aqueous	GC/MS JJ	08/05/10	08/05/10 17:54	100805L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	2.1	0.50	1		Toluene	ND	1.0	1	
Ethylbenzene	ND	1.0	1		Xylenes (total)	ND	1.0	1	
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
Dibromofluoromethane	99	80-126			1,2-Dichloroethane-d4	103	80-131		
Toluene-d8	98	80-120			1,4-Bromofluorobenzene	87	80-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-10	10-07-2297-4-C	07/29/10 12:45	Aqueous	GC/MS JJ	08/05/10	08/05/10 19:26	100805L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	240	1.0	2		Toluene	9.9	1.0	1	
Ethylbenzene	45	1.0	1		Xylenes (total)	89	1.0	1	
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
Dibromofluoromethane	94	80-126			1,2-Dichloroethane-d4	99	80-131		
Toluene-d8	96	80-120			1,4-Bromofluorobenzene	97	80-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

Date Received: 07/30/10
Work Order No: 10-07-2297
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: 6808 196th Street SW, Lynnwood, WA

Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-1	10-07-2297-5-C	07/29/10 13:00	Aqueous	GC/MS JJ	08/05/10	08/05/10 18:25	100805L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	32	0.50	1		Toluene	2.9	1.0	1	
Ethylbenzene	17	1.0	1		Xylenes (total)	48	1.0	1	
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
Dibromofluoromethane	91	80-126			1,2-Dichloroethane-d4	92	80-131		
Toluene-d8	98	80-120			1,4-Bromofluorobenzene	90	80-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-9	10-07-2297-6-C	07/29/10 13:10	Aqueous	GC/MS JJ	08/05/10	08/05/10 18:56	100805L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Toluene	ND	1.0	1	
Ethylbenzene	ND	1.0	1		Xylenes (total)	ND	1.0	1	
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
Dibromofluoromethane	102	80-126			1,2-Dichloroethane-d4	104	80-131		
Toluene-d8	95	80-120			1,4-Bromofluorobenzene	84	80-120		

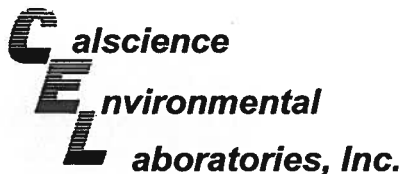
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-8	10-07-2297-7-B	07/29/10 13:25	Aqueous	GC/MS EE	08/06/10	08/07/10 08:36	100806L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	18000	120	250		Toluene	40000	1000	1000	
Ethylbenzene	17000	250	250		Xylenes (total)	110000	250	250	
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
Dibromofluoromethane	95	80-126			1,2-Dichloroethane-d4	99	80-131		
Toluene-d8	107	80-120			1,4-Bromofluorobenzene	106	80-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-001-1,622	N/A	Aqueous	GC/MS JJ	08/05/10	08/05/10 14:45	100805L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Toluene	ND	1.0	1	
Ethylbenzene	ND	1.0	1		Xylenes (total)	ND	1.0	1	
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
Dibromofluoromethane	111	80-126			1,2-Dichloroethane-d4	113	80-131		
Toluene-d8	96	80-120			1,4-Bromofluorobenzene	85	80-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

Date Received: 07/30/10
Work Order No: 10-07-2297
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: 6808 196th Street SW, Lynnwood, WA

Page 3 of 3

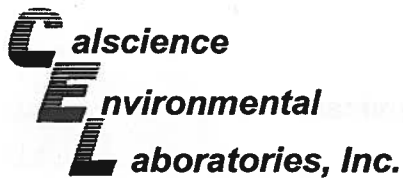
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-001-1,642	N/A	Aqueous	GC/MS EE	08/06/10	08/07/10 02:58	100806L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Toluene	ND	1.0	1	
Ethylbenzene	ND	1.0	1		Xylenes (total)	ND	1.0	1	
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
Dibromofluoromethane	106	80-126			1,2-Dichloroethane-d4	115	80-131		
Toluene-d8	99	80-120			1,4-Bromofluorobenzene	91	80-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-001-1,653	N/A	Aqueous	GC/MS EE	08/07/10	08/07/10 13:38	100807L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Toluene	ND	1.0	1	
Ethylbenzene	ND	1.0	1		Xylenes (total)	ND	1.0	1	
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
Dibromofluoromethane	96	80-126			1,2-Dichloroethane-d4	101	80-131		
Toluene-d8	97	80-120			1,4-Bromofluorobenzene	95	80-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Quality Control - Spike/Spike Duplicate



Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

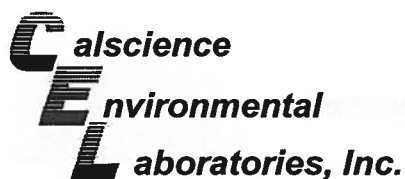
Date Received: 07/30/10
Work Order No: 10-07-2297
Preparation: EPA 5030B
Method: EPA 8260B

Project 6808 196th Street SW, Lynnwood, WA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-6	Aqueous	GC/MS JJ	08/05/10	08/05/10	100805S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	95	92	80-120	4	0-20	
Ethylbenzene	106	103	73-127	3	0-20	
Toluene	100	96	80-120	4	0-20	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - Spike/Spike Duplicate



Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

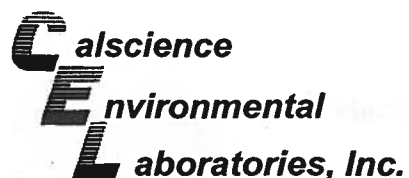
Date Received: 07/30/10
Work Order No: 10-07-2297
Preparation: EPA 5030B
Method: EPA 8260B

Project 6808 196th Street SW, Lynnwood, WA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-08-0457-3	Aqueous	GC/MS EE	08/06/10	08/07/10	100806S02

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	95	95	80-120	0	0-20	
Ethylbenzene	101	104	73-127	4	0-20	
Toluene	94	95	80-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

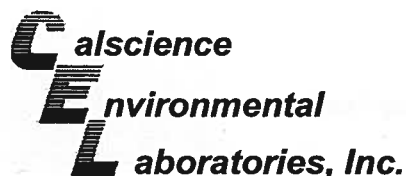
Date Received: 07/30/10
Work Order No: 10-07-2297
Preparation: EPA 5030B
Method: EPA 8260B

Project 6808 196th Street SW, Lynnwood, WA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-08-0457-2	Aqueous	GC/MS EE	08/07/10	08/07/10	100807S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	97	95	80-120	1	0-20	
Ethylbenzene	106	105	73-127	1	0-20	
Toluene	96	96	80-120	1	0-20	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - LCS/LCS Duplicate



Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

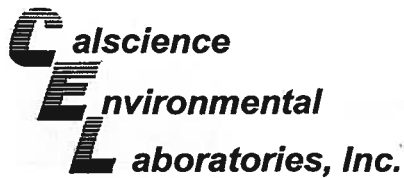
Date Received: N/A
Work Order No: 10-07-2297
Preparation: EPA 3510C
Method: NWTPH-Dx

Project: 6808 196th Street SW, Lynnwood, WA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-840-256	Aqueous	GC 43	07/30/10	08/04/10	100730B16S

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Diesel Range	100	100	75-117	0	0-13	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

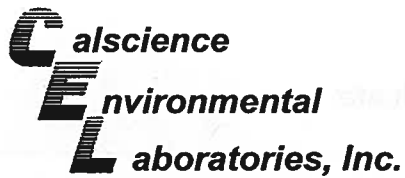
Date Received: N/A
Work Order No: 10-07-2297
Preparation: EPA 5030B
Method: EPA 8260B

Project: 6808 196th Street SW, Lynnwood, WA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-14-001-1,622	Aqueous	GC/MS JJ	08/05/10	08/05/10	100805L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	92	93	80-120	1	0-20	
Ethylbenzene	105	107	80-123	2	0-20	
Toluene	97	99	80-120	2	0-20	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - LCS/LCS Duplicate



Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

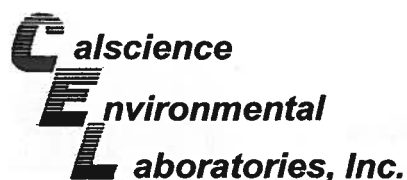
Date Received: N/A
Work Order No: 10-07-2297
Preparation: EPA 5030B
Method: EPA 8260B

Project: 6808 196th Street SW, Lynnwood, WA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-14-001-1,642	Aqueous	GC/MS EE	08/06/10	08/07/10	100806L02

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	98	96	80-120	2	0-20	
Ethylbenzene	104	104	80-123	0	0-20	
Toluene	97	96	80-120	1	0-20	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - LCS/LCS Duplicate



Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

Date Received: N/A
Work Order No: 10-07-2297
Preparation: EPA 5030B
Method: EPA 8260B

Project: 6808 196th Street SW, Lynnwood, WA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-14-001-1,653	Aqueous	GC/MS EE	08/07/10	08/07/10	100807L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	93	91	80-120	2	0-20	
Ethylbenzene	104	103	80-123	1	0-20	
Toluene	94	94	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

Work Order Number: 10-07-2297

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
E	Concentration exceeds the calibration range.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis. Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.



Shell Oil Products Chain Of Custody Record

LAB (LOCATION)

LABORATORY ()
 SFL Houston ()
 XENCO ()
 TEST AMERICA ()
 OTHER ()

INCIDENT # (SERVICES) 9 7 6 0 5 4 1 0
 DATE: 7/29/10
 PAGE: 1 of 1

Print Bill To Contact Name: Jeff Cloud - 241739
 PO # 4 0 4 0 1 9 8 9 0
 SAP # 1 7 1 1 5 2

SHIP TO ADDRESS: Street and City WA
 6808 196th Street SW, Lynnwood
 STATE (REQUIRED TO THEM, COMPANY, OR LOCAL) WA
 PHONE NO. 425-212-3100
 CONTACT NAME: Christina Schwelgart, CRA, Everett
 EMAIL: cschwelgart@CRAworld.com

PROJECT CONTACT (Agency or POC Report to) Dan Koshela - Copy to shell.lab.billing@croworld.com
 PHONE 916-925-2313x101 FAX 916-925-2391
 EMAIL: dkskela@blainetech.com

TURNAROUND TIME (CALENDAR DAYS): 5 DAYS 2 DAYS 24 HOURS RESULTS NEEDED ON WEEKEND
 STANDARD (M DAY) 5 DAYS 3 DAYS 24 HOURS

LA - RWQCS REPORT FORMAT LAST AGENCY: SHELL CONTRACT RATE APPLIES
 STATE REIMBURSEMENT RATE APPLIES
 EDO NOT NEEDED
 RECEIPT VERIFICATION REQUESTED

SPECIAL INSTRUCTIONS OR NOTES:
 Please send an additional copy of Lab Results to:
 shell.lab.billing@croworld.com
 See Caldecott PM for WA Dept. of Ecology MTCA Method A
 cleanup levels for minimum detection limits

Field Sample Identification	SAMPLING		PRESERVATIVE			MATRIX	NO. OF CONT.	TEMPERATURE ON RECEIPT °C
	DATE	TIME	HCL	NO3	H2SO4			
MW-6	7/29/10	1240	X	X	X	W	5	
MW-7	7/29/10	1220	X	X	X	W	5	
MW-2	7/29/10	1235	X	X	X	W	5	
MW-10	7/29/10	1245	X	X	X	W	5	
MW-1	7/29/10	1300	X	X	X	W	5	
MW-9	7/29/10	0100	X	X	X	W	5	
MW-8	7/29/10	1325	X	X	X	W	5	

Requested Analysis:

MTPH-GX	X
MTPH-DX w/Silica Gel Cleanup	X
BTEX (226B)	X
5 Oxygenates, MTBE, TBA, DPE, TAME, ETBE (226B)	X
EDB, EDC (226B)	X
Total Lead (6020)	X
PCBs (8082)	X
PAHs (8070 SIM)	X
VOCs Full list (2260B)	X
Pest (8080)	X
MTPH-VPH	X
MTPH-EPH	X
n-Hexane (9071B)	X

Received by: (Signature) S. Lane Date: 7/29/10 Time: 1700

Received by: (Signature) Fed Ex Date: 7/30/10 Time: 1030

Received by: (Signature) Date: Time:

FedEx. US Airbill
Express

FedEx
Tracking
Number

8704 8136 2466

Recipi

1 From This portion can be removed for Recipient's records.

Date: 7/29/10 FedEx Tracking Number: 870481362466

Sender's Name: S. Lane Phone: 206 391 6295

Company: BTS

Address: 22727 72nd S D102

City: _____ State: _____ ZIP: 98032

2 Your Internal Billing Reference

3 To
Recipient's Name: SAMPLE CONTROL Phone: 714 895-5494

Company: CALSCIENCE ENVIRON

Address: 7440 LINCOLN WAY

City: GARDEN GROVE State: CA ZIP: 92841-1427



4a Express Package Service

FedEx Priority Overnight
 FedEx Standard Overnight
 FedEx 2Day
 FedEx Express Saver

4b Express Freight Service

FedEx 1Day Freight
 FedEx 2Day Freight
 FedEx 3Day Freight

5 Packaging
 FedEx Envelope*
 FedEx Pak*
 FedEx Box
 FedEx

6 Special Handling and Delivery Signature Options

SATURDAY Delivery
 No Signature Required
 Direct Signature
 Indirect Signat

Does this shipment contain dangerous goods?
 No
 Yes
 Dry Ice
 Cargo Airc

7 Payment Bill to:

Sender: Recipient: Third Party: Credit Card:

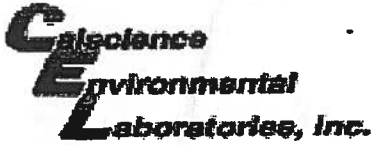
Total Packages: 1 Total Weight: 51 lbs.

*Our liability is limited to \$100 unless you declare a higher value. See the current FedEx Service Guide for details.

2297

fedex.com 1.800.GoFedEx 1.800.463.3339

RECIPIENT: PEEL HERE



WORK ORDER #: 10-07-2297

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: B.T.S

DATE: 07/30/10

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0°C – 6.0°C, not frozen)

Temperature 2.8 °C + 0.5°C (CF) = 3.3 °C Blank Sample

Sample(s) outside temperature criteria (PM/APM contacted by: _____).

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: Air Filter Metals Only PCBs Only Initial: [Signature]

CUSTODY SEALS INTACT:

Cooler _____ No (Not Intact) Not Present N/A Initial: [Signature]

Sample _____ No (Not Intact) Not Present Initial: [Signature]

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
<input type="checkbox"/> No analysis requested. <input type="checkbox"/> Not relinquished. <input type="checkbox"/> No date/time relinquished.			
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pH / Residual Chlorine / Dissolved Sulfide received within 24 hours.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (____) EnCores® TerraCores® _____

Water: VOA VOA³h VOAna₂ 125AGB 125AGBh 125AGBp 1AGB 1AGBna₂ 1AGBs

500AGB 500AGJ² 500AGJs 250AGB 250CGB 250CGBs 1PB 500PB 500PBna

250PB 250PBn 125PB 125PBz₂na 100PJ 100PJna₂ _____ _____ _____

Air: Tedlar® Summa® Other: _____ Trip Blank Lot#: _____ Labeled/Checked by: [Signature]

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: [Signature]

Preservative: h: HCL n: HNO₃ na₂: Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ z₂na: ZnAc₂+NaOH f: Field-filtered Scanned by: [Signature]