October 25, 2010
Project 101.00173.00010

Mr. Tom Middleton
Washington Department of Ecology
P.O. Box 47775
Olympia, Washington 98504-7775

Re: Groundwater Sampling Report – September 2010 Event
Former Arco Service Station #0855, Longview, Washington

Dear Mr. Middleton:

On behalf of Wakefield Family LLC (property owner), SLR International Corp (SLR) has prepared this report to present the results of the annual groundwater sampling activities conducted in September 2010 at the above-referenced property. The former Arco Service Station #0855 property is located at 4603 Ocean Beach Highway, near the western end of Longview, Washington (see Figure 1). The purposes of the groundwater sampling program for the site are to assess the effectiveness of the current deep groundwater recovery operations and the 2007 site remedial action (soil excavation and shallow groundwater extraction), and to monitor the migration and attenuation of the petroleum hydrocarbon concentrations in the shallow groundwater-bearing unit and the deep aquifer over time.

BACKGROUND

After completing the 2007 remedial action at the property, quarterly groundwater sampling results in 2007 and 2008 showed that the samples from all of the shallow groundwater monitoring wells, except MW-10, and from all of the deep groundwater monitoring wells, except DMW-4, DMW-5, DMW-9, and DMW-10, contained petroleum hydrocarbon concentrations below the Model Toxics Control Act (MTCA) Method A groundwater cleanup levels for four consecutive quarters (SLR, 2008a; SLR, 2008b; and SLR, 2008c). To remediate the remaining impacted groundwater in the deep aquifer, a deep groundwater recovery well (RW-1) was installed and a recovery/treatment system has been operating since June 2009 (SLR, 2009). After activating the system, the current groundwater sampling program has consisted of conducting annual sampling events (collect samples from all of the shallow and deep monitoring wells) in September, and conducting quarterly sampling events (collect samples from shallow well MW-10 and from deep wells DMW-5, DMW-9, and DMW-10) in December, March, and June. Based on the groundwater sampling results in September and December 2009 and March and June 2010, the samples from shallow monitoring well MW-10 contained petroleum hydrocarbon concentrations below the Method A cleanup levels for four consecutive

quarters (SLR, 2009; SLR, 2010a; SLR, 2010b; and SLR, 2010c). Therefore, MW-10 was eliminated from the future quarterly groundwater sampling events.

SEPTEMBER 2010 SAMPLING EVENT

SLR personnel conducted the groundwater sampling activities on September 14, 2010. On September 10th, SLR deactivated the deep groundwater recovery/treatment system so that the deep aquifer would be under non-pumping static conditions at the time of sampling.

Immediately prior to sampling, SLR measured the depths to groundwater in all of the shallow monitoring wells (MW-5, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, and MW-14) and all of the deep monitoring wells (DMW-3, DMW-4, DMW-5, DMW-6, DMW-7, DMW-8, DMW-9, and DMW-10) by using an electronic water level probe. The depth to groundwater measurements were converted to groundwater elevations by using the results of previous well elevation surveys conducted by Gibbs and Olson, Inc., of Longview, Washington. The depths to groundwater in the shallow wells ranged from 4.32 to 7.88 feet below the tops of the well casings. The groundwater elevations in the shallow wells ranged from 1.64 to 4.49 feet above the NAVD 88 datum. The depths to groundwater in the deep wells ranged from 5.01 to 7.59 feet below the tops of the well casings. The groundwater elevations in the deep wells ranged from 1.56 to 1.65 feet above the NAVD 88 datum. The groundwater elevations in the shallow and deep wells were inconsistent and could not be used to determine general shallow or deep groundwater flow directions beneath the site area. The groundwater monitoring data from the September 2010 sampling event, as well as from the previous groundwater sampling events, are presented in Table 1. The groundwater elevations in the shallow and deep wells on September 14, 2010, are shown on Figures 2 and 3, respectively.

SLR personnel collected groundwater samples from all of the shallow monitoring wells and all of the deep monitoring wells for laboratory analysis. SLR purged the wells by using a peristaltic pump with dedicated tubing at a flow rate of approximately 0.33 liters per minute. During purging, field parameters of temperature, conductivity, dissolved oxygen (DO), pH, dissolved ferrous iron, and oxidation-reduction potential were measured every three to five minutes. Each groundwater sample was collected following the stabilization of the field parameter measurements. The purge water is stored on site in properly labeled, 55-gallon drums, pending off-site disposal.

The groundwater samples were submitted to Friedman & Bruya, Inc. (F&B) in Seattle, Washington, for analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8021B, and gasoline-range organics (GRO) by Ecology Method NWTPH-Gx. The analytical results indicated that the groundwater samples from deep wells DMW-9 and DMW-10 contained benzene concentrations [210 and 12 micrograms

per liter (µg/L), respectively] that exceeded the MTCA Method A cleanup level (5 µg/L). The sample from DMW-9 also contained a GRO concentration (1,000 µg/L) that exceeded the Method A cleanup level (800 µg/L). The groundwater samples from deep well DMW-4 and shallow well MW-10 contained toluene, total xylenes, and/or GRO concentrations that were below the Method A cleanup levels. The groundwater samples from all of the shallow wells, except MW-10, and from deep wells DMW-3, DMW-5, DMW-6, DMW-7, and DMW-8 did not contain petroleum hydrocarbon concentrations greater than the method reporting limits (MRLs). The groundwater sample analytical results (petroleum hydrocarbons only) from the September 2010 event, as well as from the previous sampling events, are presented in Table 2. The benzene and GRO concentrations in the September 2010 samples from the shallow and deep wells are shown on Figures 2 and 3, respectively. Copies of the laboratory analytical reports are attached.

The groundwater samples were also analyzed for the following natural attenuation parameters: dissolved manganese by EPA Method 200.8, alkalinity by Standard Method SM 2320, dissolved methane by EPA Method RSK 175 Modified, sulfate by EPA Method 375.2, and nitrate by EPA Method 353.2. The sample analytical results showed that the greatest dissolved methane concentrations (2.2 and 3.7 milligrams per liter, respectively) were at the remaining areas of elevated petroleum hydrocarbon concentrations (at DMW-9 and DMW-10). The groundwater sample analytical results and field measurements (DO, redox potential, and dissolved ferrous iron) for the natural attenuation parameters (for the September 2010 event as well as from the previous sampling events) are presented in Table 3. Copies of the laboratory analytical reports are attached.

CONCLUSIONS

The 2008 groundwater sampling results from the shallow wells indicated that the 2007 remediation activities effectively removed the source of the shallow groundwater contamination and extracted most of the impacted shallow groundwater (SLR, 2008a; SLR, 2008b; and SLR, 2008c). Based on the 2009 and 2010 groundwater sampling results (SLR, 2009; SLR, 2010a; SLR, 2010b; and SLR, 2010c), including the September 2010 results, the remaining petroleum hydrocarbon concentrations in the shallow groundwater have naturally attenuated to below the MTCA Method A cleanup levels.

The 2008 groundwater sampling results from the deep wells showed that the 2007 remediation activities had limited short-term affects on the deep groundwater concentrations (SLR, 2008a; SLR, 2008b; and SLR, 2008c). To actively remediate the impacted deep groundwater, a deep groundwater recovery/treatment system has been operating since June 2009. Based on the results of the quarterly groundwater sampling events that have been conducted since the activation of the system (SLR, 2009; SLR, 2010a; SLR, 2010b; and SLR, 2010c), including the September 2010 sampling results, the benzene and GRO concentrations in the deep groundwater are decreasing due to the

operation of the system and to natural attenuation. At the source area well (DMW-9), the benzene and GRO concentrations in September 2010 were 3,090 and 7,600 µg/L, respectively, less than the concentrations in October 2008 (the last sampling event prior to activating the deep groundwater recovery/treatment system). The relatively higher dissolved methane concentrations in the remaining area of deep groundwater contamination are consistent with previous results, and indicate that the impacted groundwater occurs in a reducing (little or no oxygen) environment and that there is more biological activity where petroleum hydrocarbons are present.

If you have any questions, please call Mike Staton at (425) 471-0479.

Sincerely,

SLR International Corp

Michael D. Staton, L.G.
Principal Geologist

Attachments: Limitations
References
Tables 1, 2, and 3
Figures 1 through 3
Laboratory Analytical Reports

cc: Kurt Peterson, Cascadia Law Group PLLC (4 copies)

LIMITATIONS

The services reflected in this report were performed consistent with generally accepted professional consulting principals and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This information is solely for the use of our client unless otherwise noted. Any reliance on this information by a third party is at such party's sole risk.

Opinions and recommendations contained herein apply to conditions existing when services were performed and are intended only for the client, purposes, location, timeframes, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report.

REFERENCES

SLR. 2008a. *Remedial Action Report, Former Arco Service Station #0855, 4603 Ocean Beach Highway, Longview, Washington.* July 21.

SLR. 2008b. *Quarterly Groundwater Sampling Report – July 2008 Event, Former Arco Service Station #0855, Longview, Washington.* August 29.

SLR. 2008c. *Quarterly Groundwater Sampling Report – September/October 2008 Event, Former Arco Service Station #0855, Longview, Washington.* October 29.

SLR. 2009. *Deep Groundwater Remediation System Installation and Performance Report, Former Arco Service Station #0855, Longview, Washington.* November 4.

SLR. 2010a. *Quarterly Groundwater Sampling Report – December 2009 Event, Former Arco Service Station #0855, Longview, Washington.* January 9.

SLR. 2010b. *Quarterly Groundwater Sampling Report – March 2010 Event, Former Arco Service Station #0855, Longview, Washington.* April 5.

SLR. 2010c. *Quarterly Groundwater Sampling Report – June 2010 Event, Former Arco Service Station #0855, Longview, Washington.* July 20.

Table 1
Groundwater Monitoring Data
Former Arco Service Station #0855
Longview Washington

Well Number	Top of Casing Elevation[a] (feet)	Date Measured	Depth to Groundwater[b] (feet)	Free Product Thickness (feet)	Groundwater Elevation (feet)
Shallow Monitoring Wells					
MW-1	8.34	03/27/00	4.36	NP	3.98
		05/23/00	5.20	NP	3.14
		07/20/00	5.55	NP	2.79
		10/18/00	5.41	NP	2.93
		01/18/01	4.81	NP	3.53
		04/18/01	4.58	NP	3.76
		07/17/01	5.54	NP	2.80
		10/18/01	5.26	NP	3.08
		01/16/02	4.45	NP	3.89
		07/09/03	5.80	NP	2.54
	8.25[c]	05/25/05	4.12	NP	4.13
		12/07/05	3.77	NP	4.48
		08/16/06	6.58	NP	1.67
		Well abandoned in September 2007.			
MW-2	8.76	03/27/00	3.61	NP	5.15
		05/23/00	4.64	NP	4.12
		07/20/00	5.06	NP	3.70
		10/18/00	5.19	NP	3.57
		01/18/00	3.96	NP	4.80
		04/18/01	3.83	NP	4.93
		07/17/01	5.08	NP	3.68
		10/18/01	4.83	NP	3.93
		01/16/02	3.71	NP	5.05
		07/09/03	5.36	NP	3.40
	8.89[c]	05/25/05	4.15	NP	4.74
		12/07/05	4.09	NP	4.80
		08/16/06	5.96	NP	2.93
		Well abandoned in September 2007.			
MW-3	8.78	03/27/00	5.61	NP	3.17
		05/23/00	6.46	NP	2.32
		07/20/00	7.05	NP	1.73
		10/18/00	6.84	NP	1.94
		01/18/01	6.37	NP	2.41
		04/18/01	5.46	NP	3.32
		07/17/01	6.93	NP	1.85
		10/18/01	6.47	NP	2.31
		01/16/01	4.83	NP	3.95
		07/09/03	6.72	0.02	2.08*
	8.58[c]	05/25/05	4.65	Film	3.93
		12/07/05	4.45	0.01	4.14*
		08/16/06	6.91	0.24	1.86*
		Well abandoned in September 2007.			

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Groundwater Monitoring Data
Former Arco Service Station #0855
Longview Washington

Well Number	Top of Casing Elevation[a] (feet)	Date Measured	Depth to Groundwater[b] (feet)	Free Product Thickness (feet)	Groundwater Elevation (feet)
Shallow Monitoring Wells (continued)					
MW-7	8.45	11/15/00	6.52	NP	1.93
		01/18/01	6.24	NP	2.21
		04/18/01	5.98	NP	2.47
		07/17/01	6.44	NP	2.01
		10/18/01	6.39	NP	2.06
		01/16/02	6.31	NP	2.14
		07/09/03	7.00	NP	1.45
	8.26[c]	05/25/05	5.61	NP	2.65
		12/07/05	6.36[d]	NP	1.90
		08/16/06	6.40	NP	1.86
		Well abandoned in September 2007.			
MW-8	6.45	05/25/05	4.50	NP	1.95
		12/07/05	3.69	NP	2.76
		08/16/06	4.67	NP	1.78
		12/11/07	3.55	NP	2.90
		03/11/08	3.51	NP	2.94
		07/01/08	4.03	NP	2.42
		09/30/08	4.19	NP	2.26
		09/02/09	4.55	NP	1.90
		12/15/09	3.31	NP	3.14
		03/18/10	3.05	NP	3.40
		06/15/10	2.48	NP	3.97
		09/14/10	4.32	NP	2.13
MW-9	9.43	05/25/05	4.66	NP	4.77
		12/07/05	4.59	NP	4.84
		08/16/06	5.23	NP	4.20
		12/11/07	4.52	NP	4.91
		03/11/08	4.65	NP	4.78
		07/01/08	5.06	NP	4.37
		09/30/08	5.08	NP	4.35
		09/02/09	5.20	NP	4.23
		12/15/09	4.51	NP	4.92
		03/18/10	4.64	NP	4.79
		06/15/10	4.72	NP	4.71
		09/14/10	4.94	NP	4.49
MW-10	9.52	05/25/05	10.30	NP	-0.78
		12/07/05	5.90	NP	3.62
		08/16/06	7.18	NP	2.34
		12/11/07	4.22	NP	5.30
		03/11/08	6.02	NP	3.50
		07/01/08	6.53	NP	2.99
		09/30/08	4.51	NP	5.01
		09/02/09	7.76	NP	1.76
		12/15/09	5.97	NP	3.55
		03/18/10	8.14	NP	1.38
		06/15/10	5.15	NP	4.37
		09/14/10	7.88	NP	1.64

Table 1
Groundwater Monitoring Data
Former Arco Service Station #0855
Longview Washington

Well Number	Top of Casing Elevation[a] (feet)	Date Measured	Depth to Groundwater[b] (feet)	Free Product Thickness (feet)	Groundwater Elevation (feet)
Deep Monitoring Wells (continued)					
DMW-3	6.66	12/07/05	12.15[d]	NP	-5.49
		08/16/06	4.55	NP	2.11
		12/11/07	4.60	NP	2.06
		03/11/08	5.68	NP	0.98
		07/01/08	5.52	NP	1.14
		09/30/08	5.03	NP	1.63
		09/02/09	5.19	NP	1.47
		12/15/09	4.71	NP	1.95
		03/18/10	4.55	NP	2.11
		06/15/10	4.42	NP	2.24
		09/14/10	5.01	NP	1.65
DMW-4	8.55	12/07/05	6.30	NP	2.25
		08/16/06	7.12	NP	1.43
		12/11/07	6.08	NP	2.47
		03/11/08	6.54	NP	2.01
		07/01/08	6.41	NP	2.14
		09/30/08	6.91	NP	1.64
		09/02/09	7.13	NP	1.42
		12/15/09	6.26	NP	2.29
		03/18/10	6.43	NP	2.12
		06/15/10	6.11	NP	2.44
		09/14/10	6.97	NP	1.58
DMW-5	8.14	12/07/05	5.88	NP	2.26
		08/16/06	6.57	NP	1.57
		12/11/07	5.75	NP	2.39
		03/11/08	6.14	NP	2.00
		07/01/08	5.01	NP	3.13
		09/30/08	6.52	NP	1.62
		09/02/09	6.75	NP	1.39
		12/15/09	5.87	NP	2.27
		03/18/10	6.03	NP	2.11
		06/15/10	5.68	NP	2.46
		09/14/10	6.55	NP	1.59
DMW-6	9.15	08/16/06	7.74	NP	1.41
		12/11/07	6.68	NP	2.47
		03/11/08	7.15	NP	2.00
		07/01/08	7.04	NP	2.11
		09/30/08	7.53	NP	1.62
		09/02/09	7.79	NP	1.36
		12/15/09	6.89	NP	2.26
		03/18/10	7.06	NP	2.09
		06/15/10	6.74	NP	2.41
		09/14/10	7.59	NP	1.56

Table 2
Groundwater Sample Analytical Results - Petroleum Hydrocarbons
Former Arco Service Station #0855
Longview, Washington

Well Number	Sample Date	Benzene[a] (µg/L)	Toluene[a] (µg/L)	Ethylbenzene[a] (µg/L)	Total Xylenes[a] (µg/L)	GRO[b] (µg/L)	DRO[c] (µg/L)
MTCA Method A Cleanup Levels[d]		**5**	**1,000**	**700**	**1,000**	**800**	**500**
Shallow Monitoring Wells							
MW-1	03/27/00	ND	ND	ND	ND	ND	ND
	05/23/00	ND	ND	ND	ND	ND	NA
	07/20/00	ND	ND	ND	ND	ND	NA
	10/18/00	ND	ND	1.61	ND	404	NA
	01/18/01	ND	ND	ND	ND	95.6	NA
	04/18/01	ND	ND	ND	ND	NA	NA
	07/17/01	ND	2.63	1.46	ND	386	NA
	10/18/01	ND	ND	ND	ND	ND	NA
	01/16/02	ND	ND	ND	ND	104	NA
	07/09/03	<0.50	<0.50	<0.50	<1.0	<50	<250
	05/25/05	<1.0	<1.0	<1.0	<2.0	<100	<50
	11/30/05	<1.0	<1.0	<1.0	<3.0	<100	<50
	Well abandoned in September 2007.						
MW-2	03/27/00	**6.89**	49.5	599	**2,490**	**17,100**	ND
	05/23/00	**26.2**	16.2	614	**1,770**	**13,200**	NA
	07/20/00	**11.9**	11.8	304	330	**7,220**	NA
	10/18/00	3.67	1.23	13.9	7.55	743	NA
	01/18/00	ND	ND	41.1	5.62	691	NA
	04/18/01	ND	ND	8.73	ND	NA	NA
	07/17/01	ND	1.26	14	ND	430	NA
	10/18/01	2.11	ND	3.64	ND	304	NA
	01/16/02	1.16	0.81	37.1	6.71	370	NA
	07/09/03	0.86	<0.50	6.43	1.28	131	<250
	05/30/05	<1.0	<1.0	<1.0	<2.0	<100	52
	12/01/05	<1.0	<1.0	<1.0	<3.0	120	<50
	Well abandoned in September 2007.						
MW-3	03/07/00	**7,520**	**12,900**	**2,780**	**14,500**	**93,700**	ND
	05/23/00	**4,710**	**8,330**	**2,280**	**11,200**	**65,200**	NA
	07/20/00	**10,700**	**22,600**	**3,160**	**17,400**	**145,000**	NA
	10/18/00	**12,900**	**33,000**	**4,890**	**26,700**	**179,000**	NA
	01/18/01	**9,380**	**17,200**	**3,940**	**20,230**	**121,000**	NA
	04/18/01	**7,700**	**15,300**	**3,430**	**16,990**	NA	NA
	07/17/01	**10,100**	**21,400**	**4,120**	**20,900**	**940,000**	NA
	10/18/01	**7,200**	**19,700**	**3,340**	**17,300**	**139,000**	NA
	01/16/02	**13,600**	**26,600**	**3,920**	**20,800**	**177,000**	NA
	07/09/03	**11,800**	**20,100**	**4,560**	**21,200**	**124,000**	**3,750**
	05/25/05	Not sampled due to presence of free product.					
	11/28/05	Not sampled due to presence of free product.					
	Well abandoned in September 2007.						

Table 2
Groundwater Sample Analytical Results - Petroleum Hydrocarbons
Former Arco Service Station #0855
Longview, Washington

Well Number	Sample Date	Benzene[a] (µg/L)	Toluene[a] (µg/L)	Ethylbenzene[a] (µg/L)	Total Xylenes[a] (µg/L)	GRO[b] (µg/L)	DRO[c] (µg/L)
MTCA Method A Cleanup Levels[d]		**5**	**1,000**	**700**	**1,000**	**800**	**500**
Shallow Monitoring Wells (continued)							
MW-8	05/25/05	<1.0	<1.0	<1.0	<3.0	<100	<70
	11/29/05	<1.0	<1.0	<1.0	<3.0	<100	<50
	12/11/07	<1.0	<1.0	<1.0	<3.0	<100	<50
	03/11/08	<1.0	<1.0	<1.0	<3.0	<100	<50
	07/01/08	<1.0	<1.0	<1.0	<3.0	<100	<50
	10/01/08	<1.0	<1.0	<1.0	<3.0	<100	NA
	09/03/09	<1.0	<1.0	<1.0	<3.0	<100	NA
	09/14/10	<1.0	<1.0	<1.0	<3.0	<100	NA
MW-9	05/25/05	<1.0	<1.0	<1.0	<3.0	<100	<50
	11/28/05	<1.0	<1.0	<1.0	<3.0	<100	<50
	12/11/07	<1.0	<1.0	<1.0	<3.0	<100	<50
	03/11/08	<1.0	<1.0	<1.0	<3.0	<100	<50
	07/02/08	<1.0	<1.0	<1.0	<3.0	<100	<50
	10/02/08	<1.0	<1.0	<1.0	<3.0	<100	NA
	09/03/09	<1.0	<1.0	<1.0	<3.0	<100	NA
	09/14/10	<1.0	<1.0	<1.0	<3.0	<100	NA
MW-10	05/25/05	**45**	<1.0	110	<2.0	**1,000**	**1,200**
	11/30/05	**31**	<1.0	110	<3.0	**1,400**	**1,000[f]**
	12/11/07	**9.0**	3.0	65	<3.0	**3,100**	**1,000[g]**
	03/11/08	**16**	2.0	40	<3.0	**3,000**	**1,200[g]**
	07/03/08	**18**	2.0	53	41	**2,500**	**1,100[g]**
	10/02/08	<1.0	<1.0	<1.0	<3.0	**1,300**	NA
	09/03/09	<1.0	<1.0	2.0	<3.0	200	NA
	12/15/09	3.0	<1.0	11	<3.0	310	NA
	03/18/10	<1.0	<1.0	<1.0	<3.0	<100	NA
	06/15/10	<1.0	<1.0	<1.0	<3.0	170	NA
	09/14/10	<1.0	<1.0	<1.0	<3.0	180	NA
MW-11	12/05/05	<1.0	<1.0	<1.0	<3.0	<100	<50
	12/11/07	<1.0	<1.0	<1.0	<3.0	<100	<50
	03/11/08	<1.0	<1.0	<1.0	<3.0	<100	<50
	07/02/08	<1.0	<1.0	<1.0	<3.0	<100	<50
	10/02/08	<1.0	<1.0	<1.0	<3.0	<100	NA
	09/03/09	<1.0	<1.0	<1.0	<3.0	<100	NA
	09/14/10	<1.0	<1.0	<1.0	<3.0	<100	NA

Table 2
Groundwater Sample Analytical Results - Petroleum Hydrocarbons
Former Arco Service Station #0855
Longview, Washington

Well Number	Sample Date	Benzene[a] (µg/L)	Toluene[a] (µg/L)	Ethylbenzene[a] (µg/L)	Total Xylenes[a] (µg/L)	GRO[b] (µg/L)	DRO[c] (µg/L)
MTCA Method A Cleanup Levels[d]		**5**	**1,000**	**700**	**1,000**	**800**	**500**
Deep Monitoring Wells (continued)							
DMW-5	12/05/05	**36**	<1.0	<1.0	<3.0	130	<50
	08/17/06	**74**	<1.0	<1.0	<3.0	170	<50
	12/11/07	**41**	<1.0	<1.0	<3.0	100	<50
	03/11/08	**10**	<1.0	<1.0	<3.0	<100	<50
	07/02/08	1.0	<1.0	<1.0	<3.0	<100	<50
	10/01/08	**42**	<1.0	<1.0	<3.0	110	NA
	09/03/09	<1.0	<1.0	<1.0	<3.0	<100	NA
	12/15/09	1.0	<1.0	<1.0	<3.0	<100	NA
	03/18/10	**13**	<1.0	<1.0	<3.0	<100	NA
	06/15/10	**13**	<1.0	<1.0	<3.0	<100	NA
	09/14/10	<1.0	<1.0	<1.0	<3.0	<100	NA
DMW-6	08/16/06	<1.0	<1.0	<1.0	<3.0	<100	<50
	12/11/07	<1.0	<1.0	<1.0	<3.0	<100	<50
	03/11/08	<1.0	<1.0	<1.0	<3.0	<100	<50
	07/02/08	<1.0	<1.0	<1.0	<3.0	<100	<50
	10/02/08	<1.0	<1.0	<1.0	<3.0	<100	NA
	09/03/09	<1.0	<1.0	<1.0	<3.0	<100	NA
	09/14/10	<1.0	<1.0	<1.0	<3.0	<100	NA
DMW-7	08/16/06	<1.0	<1.0	<1.0	<3.0	<100	<50
	12/11/07	<1.0	<1.0	<1.0	<3.0	<100	<50
	03/11/08	<1.0	<1.0	<1.0	<3.0	<100	<50
	07/01/08	<1.0	<1.0	<1.0	<3.0	<100	<50
	10/01/08	<1.0	<1.0	<1.0	<3.0	<100	NA
	09/03/09	<1.0	<1.0	<1.0	<3.0	<100	NA
	09/14/10	<1.0	<1.0	<1.0	<3.0	<100	NA
DMW-8	08/16/06	<1.0	<1.0	<1.0	<3.0	<100	<50
	12/11/07	<1.0	<1.0	<1.0	<3.0	<100	<50
	03/11/08	<1.0	<1.0	<1.0	<3.0	<100	<50
	07/02/08	<1.0	<1.0	<1.0	<3.0	<100	<50
	10/02/08	<1.0	<1.0	<1.0	<3.0	<100	NA
	09/03/09	<1.0	<1.0	<1.0	<3.0	<100	NA
	09/14/10	<1.0	<1.0	<1.0	<3.0	<100	NA
DMW-9	12/11/07	**6,100**	**1,900**	**970**	**3,100**	**27,000**	**600[g]**
	03/11/08	**3,000**	150	380	880	**13,000**	450[g]
	07/03/08	**3,600**	3.0	320	610	**9,500**	**520[g]**
	10/02/08	**3,300**	4.0	140	270	**8,600**	NA
	09/03/09	**2,800**	4.0	320	**1,100**	**14,000**	NA
	12/15/09	**980**	2.0	<1.0	**1,100**	**5,300**	NA
	03/18/10	**190**	<1.0	10	200	**1,600**	NA
	06/15/10	**50**	<1.0	9.1	60	630	NA
	09/14/10	**210**	<1.0	5.2	120	**1,000**	NA

Table 3
Groundwater Sample Analytical Results - Natural Attenuation Parameters
Former Arco Service Station #0855
Longview, Washington

Sample Location	Sample Date	Nitrate[a] (mg/L)	Sulfate[a] (mg/L)	Dissolved Methane[b] (mg/L)	Dissolved Oxygen[c] (mg/L)	Dissolved Manganese[d] (mg/L)	Dissolved Ferrous Iron[e] (mg/L)	Alkalinity[f] (mg/L $CaCO^3$)	Redox Potential[g] (mV)
Shallow Wells									
MW-5	12/12/07	12.2	969	0.6	0.2	2.9	5.0	10.3	119
	03/13/08	2.3	341	<0.007	0.4	2.5	3.3	19.3	-123
	07/02/08	0.5	275	0.5	0.1	1.4	NM	80.8	10.0
	10/02/08	0.6	288	0.5	1.7	1.9	2.9	106	92.8
	09/03/09	<0.1	202	0.3	0.6	1.4	4.6	49.4	-67.4
	09/14/10	0.07	202	0.03	3.5	1.7	2.2	37.8	33.7
MW-8	12/12/07	<0.01	4.8	0.1	1.9	0.5	1.7	33.3	248
	03/13/08	<0.2	6.6	0.001	0.7	0.4	2.1	57.6	-140
	07/01/08	<0.1	14.0	2.0	0.2	0.4	NM	73.0	-78.9
	10/01/08	<0.1	15.9	1.1	1.3	0.5	3.6	74.1	-49.3
	09/03/09	<0.1	0.1	1.5	0.7	0.4	4.4	67.4	-110.3
	09/14/10	0.02	1.4	0.3	2.8	0.5	3.2	75.9	-70.6
MW-9	12/12/07	0.5	5.0	0.0008	4.0	0.004	<0.1	40.1	237
	03/13/08	0.5	8.5	3.3	3.2	0.01	0.6	39.7	-33.5
	07/02/08	1.2	36.4	<0.0007	2.2	0.02	NM	80.2	85.6
	10/02/08	0.3	8.0	0.004	2.8	0.4	0.6	51.6	135
	09/03/09	0.3	9.3	0.010	1.9	0.5	0.4	52.9	-123
	09/14/10	1.8	25.2	0.02	4.1	0.01	0.0	118	39.3
MW-10	12/12/07	0.04	74.9	6.5	3.0	2.4	2.0	174	294
	03/13/08	<0.2	186	1.8	2.1	2.2	3.1	160	-117
	07/02/08	<0.2	199	7.3	0.1	3.3	NM	232	15.2
	10/02/08	<0.1	69.0	1.7	1.3	2.1	3.0	181	111
	09/03/09	<0.1	34.3	7.9	1.3	1.4	3.0	180	111
	09/14/10	0.2	11.3	0.9	2.4	1.6	3.0	122	-24.6
MW-11	12/12/07	0.8	643	0.1	0.6	1.8	3.8	28.4	200
	03/13/08	0.4	199	<0.0007	0.6	2.5	1.4	45.1	-81.5
	07/02/08	0.04	162	0.2	0.2	1.0	NM	89.4	25.4
	10/02/08	<0.1	89.5	0.4	1.5	1.8	2.4	138	27.1
	09/03/09	<0.1	82.6	0.6	0.7	1.6	4.4	126	-88.1
	09/14/10	0.3	86.4	0.03	1.5	1.2	2.7	112	-67.4
MW-12	12/12/07	37.0	1,500	0.2	0.7	5.3	3.8	6.9	178
	03/13/08	27.5	1,060	0.0009	0.8	6.8	<0.1	58.8	-147
	07/02/08	<0.1	204	0.5	0.2	8.3	NM	52.3	83.7
	10/02/08	0.4	1,280	0.3	0.9	11.3	<0.1	91.8	141
	09/03/09	<0.1	882	0.8	1.7	11.5	1.2	146	-117
	09/14/10	0.02	547	0.03	2.8	6.6	0.0	187	32.7
MW-13	12/12/07	31.7	1,590	0.04	NM	8.7	<0.1	70.7	236
	03/13/08	21.5	1,540	0.005	0.6	9.1	<0.1	218	-113
	07/03/08	4.5	1,420	0.007	0.1	9.8	NM	133	21.9
	10/02/08	1.9	1,800	0.02	1.3	16.3	<0.1	152	376
	09/03/09	<0.1	805	0.1	0.6	11.3	0.2	96	-66.8
	09/14/10	0.07	1,038	0.05	2.2	9.8	0.0	74.2	64.8
MW-14	12/12/07	16.7	1,190	0.07	2.5	9.4	0.2	16.0	215
	03/13/08	5.7	945	0.0009	2.4	7.1	1.2	57.8	-164
	07/02/08	1.0	891	<0.0007	0.3	2.4	NM	43.4	28.7
	10/01/08	0.3	879	<0.0007	1.6	1.9	<0.1	80.7	547
	09/03/09	<0.1	444	0.10	0.7	1.1	<0.1	45.4	-108
	09/14/10	0.05	294	<0.005	2.7	0.02	0.0	24.8	91.9

Table 3
Groundwater Sample Analytical Results - Natural Attenuation Parameters
Former Arco Service Station #0855
Longview, Washington

Sample Location	Sample Date	Nitrate[a] (mg/L)	Sulfate[a] (mg/L)	Dissolved Methane[b] (mg/L)	Dissolved Oxygen[c] (mg/L)	Dissolved Manganese[d] (mg/L)	Dissolved Ferrous Iron[e] (mg/L)	Alkalinity[f] (mg/L $CaCO^3$)	Redox Potential[g] (mV)
Deep Wells (continued)									
DMW-10	12/12/07	<0.01	24.2	11.3	0.09	3.0	3.6	191	92.5
	03/13/08	<0.2	7.7	8.1	0.1	5.4	3.1	227	-94.2
	07/02/08	<0.1	27.9	11.0	0.3	4.0	NM	266	-113
	10/01/08	<0.2	5.3	11.5	1.5	4.5	4.4	271	-0.6
	09/03/09	<0.05	32.7	2.9	1.1	2.1	2.8	117	-343.0
	09/14/10	0.02	<1.0	3.7	1.2	1.7	3.9	93	-96.4

NOTES:

NM = Not measured.

mg/L = milligrams per liter (ppm).

[a] Nitrate by EPA Method 353.2.

[a] Sulfate by EPA Method 375.2.

[b] Dissolved methane by EPA Method RSK 175 Modified.

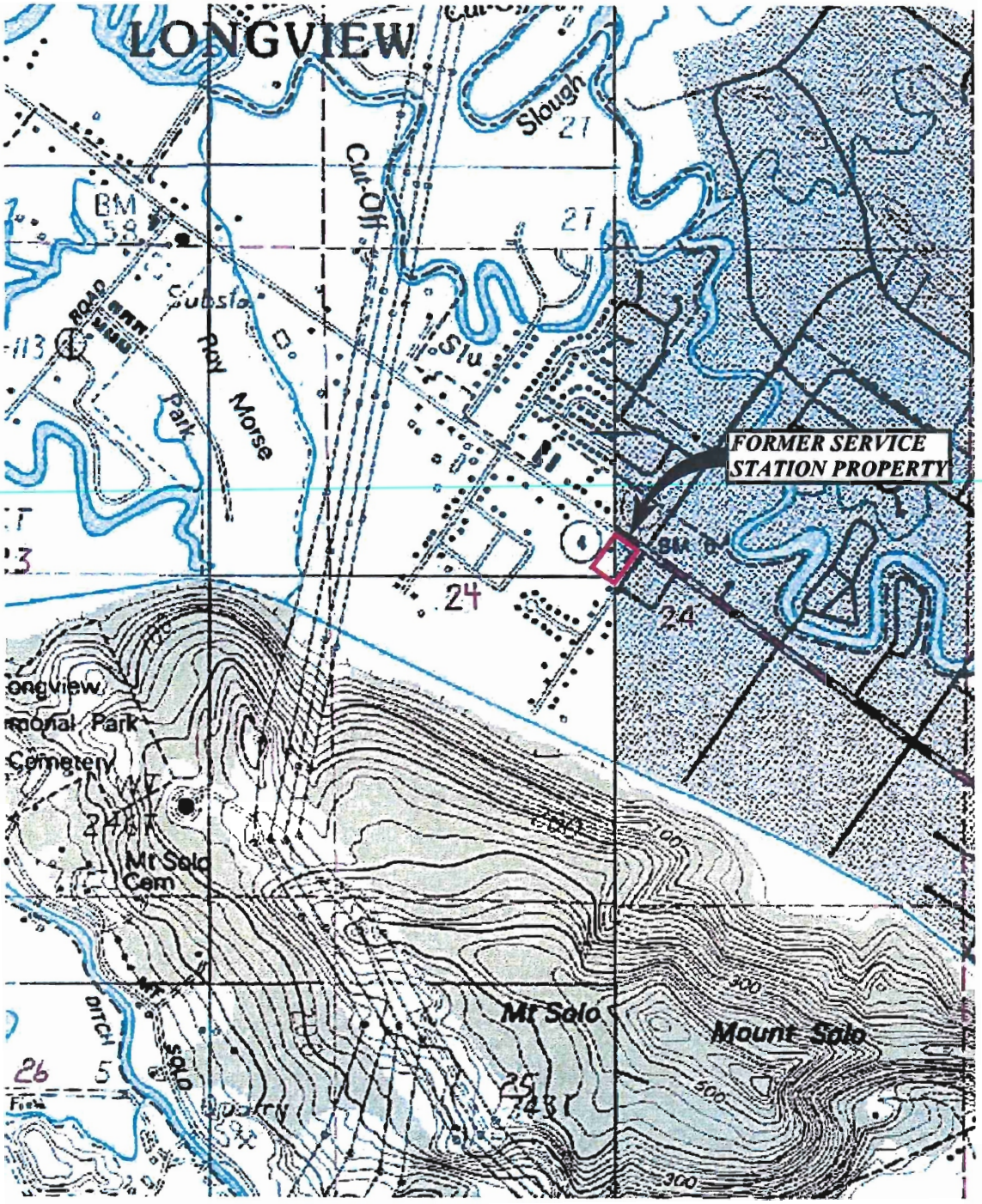
[c] Dissolved oxygen by EPA Method 360.1 (field instrument reading).

[d] Dissolved manganese by EPA Method 200.8.

[e] Dissolved ferrous iron by Standard Method SM 3500 (field test kit).

[f] Alkalinity by Standard Method SM 2320.

[g] Oxidation-reduction (redox) potential by EPA Method D1498-76 (field instrument reading).



WASHINGTON

0 1500 3000

SCALE IN FEET

SOURCE: USGS 7.5 Minute Quadrangles Kelso, 1970 Contour Interval 20 Feet and Abernathy Mtn., 1986 Contour Interval 20 Feet.

SLR

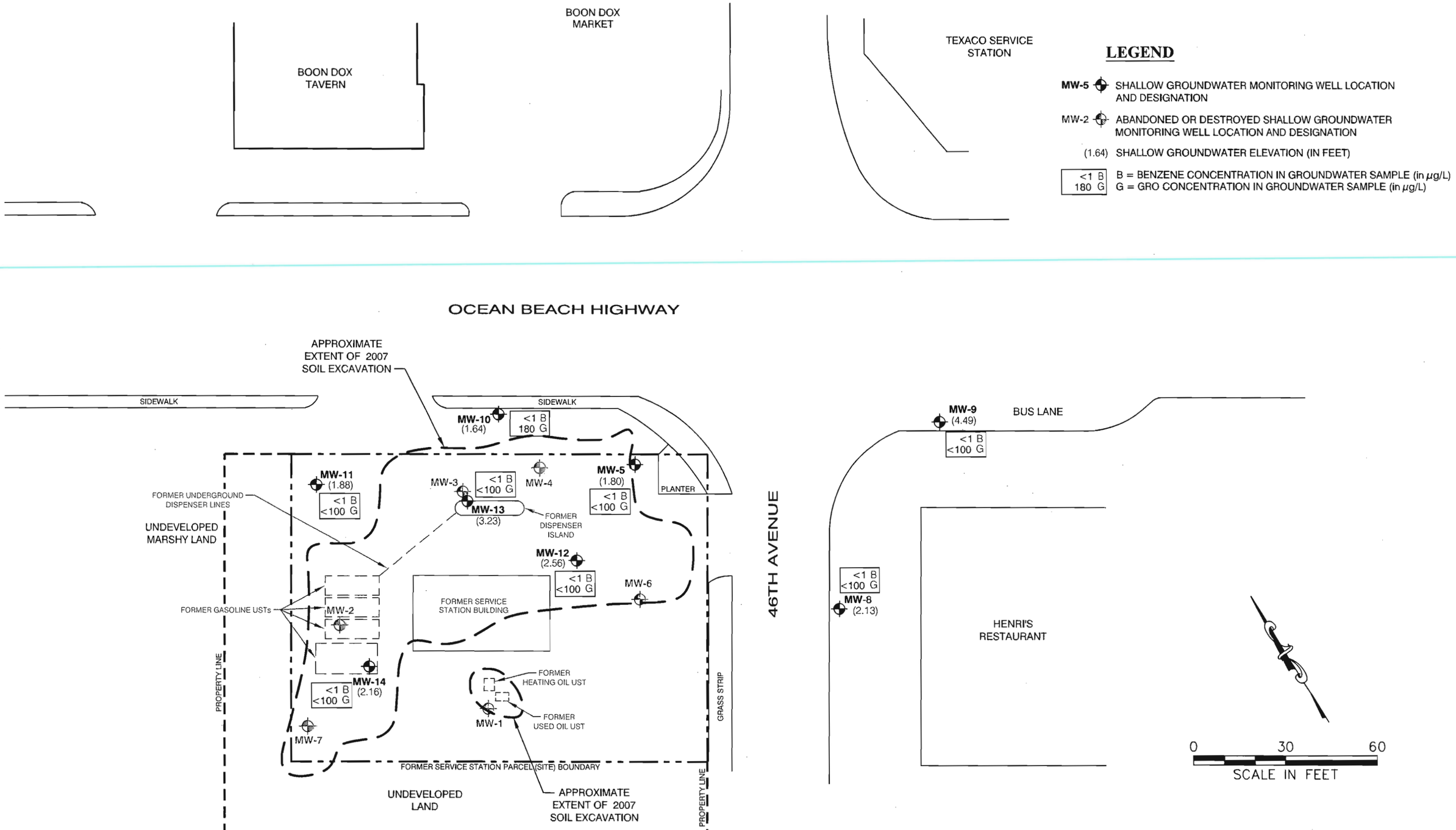
22118 20th AVE SE
BUILDING G, SUITE 202
BOTHELL, WA 98021

T: 425-402-8800
F: 425-402-8488

DATE	01/10
DWN.	BDT
APPR.	MDJ
REVIS.	
PROJECT NO.	101.00173.00010

FIGURE 1
FORMER ARCO SERVICE STATION #0855
LONGVIEW, WASHINGTON

PROPERTY LOCATION MAP



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SLR
22118 20th AVE SE
BUILDING G, SUITE 202
BOTHELL, WA 98021
T: 425-402-8800
F: 425-402-8488

DATE 07/10
DWN. BDT
APPR. MDS
REVIS.
PROJECT NO. 101.00173.00010

FIGURE 2
FORMER ARCO SERVICE STATION #0855
LONGVIEW, WASHINGTON

SHALLOW GROUNDWATER SAMPLING RESULTS SEPTEMBER 14, 2010

BOON DOX MARKET

BOON DOX TAVERN

TEXACO SERVICE STATION

<1 B
<100 G
DMW-7
(1.57)

LEGEND

- **DMW-7** — DEEP GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- **RW-1** — DEEP GROUNDWATER RECOVERY WELL LOCATION AND LOCATION
- DMW-1 — ABANDONED DEEP GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- (1.58) DEEP GROUNDWATER ELEVATION (IN FEET)
- **210** B / **1,000** G — B = BENZENE CONCENTRATION IN GROUNDWATER SAMPLE (in µg/L); G = GRO CONCENTRATION IN GROUNDWATER SAMPLE (in µg/L)

VALUES IN BOLD EXCEED MTCA METHOD A CLEANUP LEVELS

NM= NOT MEASURED

OCEAN BEACH HIGHWAY

SIDEWALK

DMW-8
(1.59)
<1 B
<100 G

SIDEWALK

<1 B
<100 G
DMW-6
(1.56)

BUS LANE

DMW-5
(1.59)
<1 B
<100 G

DMW-1
DMW-9
(1.63)
210 B
1,000 G

DMW-4
(1.58)
PLANTER
<1 B
<100 G

FORMER UNDERGROUND DISPENSER LINES

UNDEVELOPED MARSHY LAND

RW-1
(NM)

FORMER DISPENSER ISLAND

46TH AVENUE

FORMER GASOLINE USTs

FORMER SERVICE STATION BUILDING

DMW-10
(1.61)

DMW-2

12 B
<100 G

PROPERTY LINE

FORMER HEATING OIL UST

FORMER USED OIL UST

<1 B
<100 G
DMW-3
(1.65)

GRASS STRIP

FORMER SERVICE STATION PARCEL (SITE) BOUNDARY

UNDEVELOPED LAND

PROPERTY LINE

HENRI'S RESTAURANT

0 30 60
SCALE IN FEET

SLR
22118 20th AVE SE
BUILDING G, SUITE 202
BOTHELL, WA 98021
T: 425-402-8800
F: 425-402-8488

DATE 07/10
DWN. BDT
APPR. MDS
REVIS. ____
PROJECT NO.
101.00173.00010

FIGURE 3
FORMER ARCO SERVICE STATION #0855
LONGVIEW, WASHINGTON

DEEP GROUNDWATER SAMPLING RESULTS SEPTEMBER 14, 2010

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
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3012 16th Avenue West
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TEL: (206) 285-8282
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October 1, 2010

Mike Staton, Project Manager
SLR International Corp.
22118 20th Ave. SE., G-202
Bothell, WA 98021

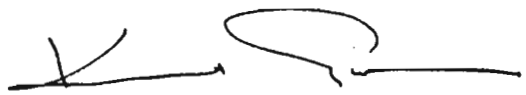
Dear Mr. Staton:

Included are the results from the testing of material submitted on September 15, 2010 from the 101.00173.00010 Former Arco 0855, F&BI 009133 project. There are 23 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Kurt Johnson
Project Manager

Enclosures
SLR1001R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 15, 2010 by Friedman & Bruya, Inc. from the SLR International Corp. 101.00173.00010 Former Arco 0855, F&BI 009133 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SLR International Corp.
009133-01	MW5-9010
009133-02	MW8-9010
009133-03	MW9-9010
009133-04	MW10-9010
009133-05	MW11-9010
009133-06	MW12-9010
009133-07	MW13-9010
009133-08	MW14-9010
009133-09	DMW3-9010
009133-10	DMW4-9010
009133-11	DMW5-9010
009133-12	DMW6-9010
009133-13	DMW7-9010
009133-14	DMW8-9010
009133-15	DMW9-9010
009133-16	DMW10-9010

The samples were sent to Aquatic Research for nitrate, sulfate, and alkalinity analyses. In addition, the samples were sent to Fremont Analytical for dissolved methane analysis. Review of the enclosed reports indicates that all quality assurance were acceptable.

All quality control requirements were acceptable.

Date of Report: 10/01/10
Date Received: 09/15/10
Project: 101.00173.00010 Former Arco 0855, F&BI 009133
Date Extracted: 09/16/10
Date Analyzed: 09/16/10 and 09/17/10

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
MW5-9010 009133-01	<1	<1	<1	<3	<100	91
MW8-9010 009133-02	<1	<1	<1	<3	<100	90
MW9-9010 009133-03	<1	<1	<1	<3	<100	91
MW10-9010 009133-04	<1	<1	<1	<3	180	95
MW11-9010 009133-05	<1	<1	<1	<3	<100	92
MW12-9010 009133-06	<1	<1	<1	<3	<100	91
MW13-9010 009133-07	<1	<1	<1	<3	<100	90
MW14-9010 009133-08	<1	<1	<1	<3	<100	90
DMW3-9010 009133-09	<1	<1	<1	<3	<100	90
DMW4-9010 009133-10	<1	1.2	<1	3.3	<100	91
DMW5-9010 009133-11	<1	<1	<1	<3	<100	91

Date of Report: 10/01/10
Date Received: 09/15/10
Project: 101.00173.00010 Former Arco 0855, F&BI 009133
Date Extracted: 09/16/10
Date Analyzed: 09/16/10 and 09/17/10

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
DMW6-9010 009133-12	<1	<1	<1	<3	<100	88
DMW7-9010 009133-13	<1	<1	<1	<3	<100	88
DMW8-9010 009133-14	<1	<1	<1	<3	<100	90
DMW9-9010 009133-15	210	<1	5.2	120	1,000	116
DMW10-9010 009133-16	12	<1	<1	<3	<100	92
Method Blank 00-1469 MB	<1	<1	<1	<3	<100	91

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW5-9010	Client:	SLR International Corp.
Date Received:	09/15/10	Project:	101.00173.00010 Former Arco 0855
Date Extracted:	09/17/10	Lab ID:	009133-01
Date Analyzed:	09/21/10	Data File:	009133-01.029
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	79	60	125

Analyte:	Concentration ug/L (ppb)
Manganese	1,720

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW8-9010	Client:	SLR International Corp.
Date Received:	09/15/10	Project:	101.00173.00010 Former Arco 0855
Date Extracted:	09/17/10	Lab ID:	009133-02
Date Analyzed:	09/21/10	Data File:	009133-02.030
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	101	60	125

Analyte:	Concentration ug/L (ppb)
Manganese	530

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW9-9010	Client:	SLR International Corp.
Date Received:	09/15/10	Project:	101.00173.00010 Former Arco 0855
Date Extracted:	09/17/10	Lab ID:	009133-03
Date Analyzed:	09/21/10	Data File:	009133-03.031
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	87	60	125

Analyte:	Concentration ug/L (ppb)
Manganese	11.7

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW10-9010	Client:	SLR International Corp.
Date Received:	09/15/10	Project:	101.00173.00010 Former Arco 0855
Date Extracted:	09/17/10	Lab ID:	009133-04
Date Analyzed:	09/21/10	Data File:	009133-04.032
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	105	60	125

Analyte:	Concentration ug/L (ppb)
Manganese	1,600

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW11-9010	Client:	SLR International Corp.
Date Received:	09/15/10	Project:	101.00173.00010 Former Arco 0855
Date Extracted:	09/17/10	Lab ID:	009133-05
Date Analyzed:	09/21/10	Data File:	009133-05.033
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	90	60	125

Analyte:	Concentration ug/L (ppb)
Manganese	1,240

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW12-9010	Client:	SLR International Corp.
Date Received:	09/15/10	Project:	101.00173.00010 Former Arco 0855
Date Extracted:	09/17/10	Lab ID:	009133-06
Date Analyzed:	09/21/10	Data File:	009133-06.010
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	89	60	125

Analyte:	Concentration ug/L (ppb)
Manganese	6,580

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW13-9010	Client:	SLR International Corp.
Date Received:	09/15/10	Project:	101.00173.00010 Former Arco 0855
Date Extracted:	09/17/10	Lab ID:	009133-07 x10
Date Analyzed:	09/21/10	Data File:	009133-07 x10.045
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	95	60	125

Analyte:	Concentration ug/L (ppb)
Manganese	9,800

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW14-9010	Client:	SLR International Corp.
Date Received:	09/15/10	Project:	101.00173.00010 Former Arco 0855
Date Extracted:	09/17/10	Lab ID:	009133-08
Date Analyzed:	09/21/10	Data File:	009133-08.035
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	85	60	125

Analyte:	Concentration ug/L (ppb)
Manganese	21.0

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	DMW3-9010	Client:	SLR International Corp.
Date Received:	09/15/10	Project:	101.00173.00010 Former Arco 0855
Date Extracted:	09/17/10	Lab ID:	009133-09
Date Analyzed:	09/21/10	Data File:	009133-09.036
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	87	60	125

Analyte:	Concentration ug/L (ppb)
Manganese	1,850

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	DMW4-9010	Client:	SLR International Corp.
Date Received:	09/15/10	Project:	101.00173.00010 Former Arco 0855
Date Extracted:	09/17/10	Lab ID:	009133-10
Date Analyzed:	09/21/10	Data File:	009133-10.037
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	103	60	125

Analyte:	Concentration ug/L (ppb)
Manganese	2,050

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	DMW5-9010	Client:	SLR International Corp.
Date Received:	09/15/10	Project:	101.00173.00010 Former Arco 0855
Date Extracted:	09/17/10	Lab ID:	009133-11
Date Analyzed:	09/21/10	Data File:	009133-11.038
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	93	60	125

Analyte:	Concentration ug/L (ppb)
Manganese	1,650

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	DMW6-9010	Client:	SLR International Corp.
Date Received:	09/15/10	Project:	101.00173.00010 Former Arco 0855
Date Extracted:	09/17/10	Lab ID:	009133-12
Date Analyzed:	09/21/10	Data File:	009133-12.040
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	115	60	125

Analyte:	Concentration ug/L (ppb)
Manganese	1,920

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	DMW7-9010	Client:	SLR International Corp.
Date Received:	09/15/10	Project:	101.00173.00010 Former Arco 0855
Date Extracted:	09/17/10	Lab ID:	009133-13
Date Analyzed:	09/21/10	Data File:	009133-13.041
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	113	60	125

Analyte:	Concentration ug/L (ppb)
Manganese	4,400

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	DMW8-9010	Client:	SLR International Corp.
Date Received:	09/15/10	Project:	101.00173.00010 Former Arco 0855
Date Extracted:	09/17/10	Lab ID:	009133-14
Date Analyzed:	09/21/10	Data File:	009133-14.042
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	101	60	125

Analyte:	Concentration ug/L (ppb)
Manganese	1,980

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	DMW9-9010	Client:	SLR International Corp.
Date Received:	09/15/10	Project:	101.00173.00010 Former Arco 0855
Date Extracted:	09/17/10	Lab ID:	009133-15
Date Analyzed:	09/21/10	Data File:	009133-15.043
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	121	60	125

Analyte:	Concentration ug/L (ppb)
Manganese	2,050

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	DMW10-9010	Client:	SLR International Corp.
Date Received:	09/15/10	Project:	101.00173.00010 Former Arco 0855
Date Extracted:	09/17/10	Lab ID:	009133-16
Date Analyzed:	09/21/10	Data File:	009133-16.044
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	98	60	125

Analyte:	Concentration ug/L (ppb)
Manganese	1,730

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SLR International Corp.
Date Received:	NA	Project:	101.00173.00010 Former Arco 0855
Date Extracted:	09/17/10	Lab ID:	I0-520 mb
Date Analyzed:	09/21/10	Data File:	I0-520 mb.008
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	80	60	125

Analyte:	Concentration ug/L (ppb)
Manganese	<1

Date of Report: 10/01/10
Date Received: 09/15/10
Project: 101.00173.00010 Former Arco 0855, F&BI 009133

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 009133-05 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	100	72-119
Toluene	ug/L (ppb)	50	110	71-113
Ethylbenzene	ug/L (ppb)	50	113	72-114
Xylenes	ug/L (ppb)	150	111	72-113
Gasoline	ug/L (ppb)	1,000	96	70-119

Date of Report: 10/01/10
Date Received: 09/15/10
Project: 101.00173.00010 Former Arco 0855, F&BI 009133

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 200.8

Laboratory Code: 009133-06 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Manganese	ug/L (ppb)	20	6,580	0 b	0 b	50-150	0 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Manganese	ug/L (ppb)	20	102	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

AQUATIC RESEARCH INCORPORATED

LABORATORY & CONSULTING SERVICES

3927 AURORA AVENUE NORTH, SEATTLE, WA 98103

PHONE: (206) 632-2715 FAX: (206) 632-2417

CASE FILE NUMBER: FBI007-08 **PAGE 1**

REPORT DATE: 09/29/10 REVISED 10/18/10

DATE SAMPLED: 09/14/10 **DATE RECEIVED:** 09/15/10

FINAL REPORT, LABORATORY ANALYSIS OF SELECTED PARAMETERS ON WATER SAMPLES FROM FRIEDMAN & BRUYA, INC. / PROJECT NO. 009133

CASE NARRATIVE

Sixteen water samples were received by the laboratory in good condition and analyzed according to the chain of custody. No difficulties were encountered in the preparation or analysis of these samples. Sample data follows while QA/QC data is contained on the subsequent pages. The report has been revised to reflect the change in sample ID "MW3-0910" to "DMW3-0910."

SAMPLE DATA

SAMPLE ID	ALKALINITY (mgCaCO3/L)	SULFATE (mg/L)	NITRATE (mg/L)
MW5-0910	37.8	202	0.066
MW8-0910	75.9	1.40	0.023
MW9-0910	118	25.2	1.75
MW10-0910	122	11.3	0.198
MW11-0910	112	86.4	0.316
MW12-0910	187	547	0.018
MW13-0910	74.2	1038	0.069
MW14-0910	24.8	294	0.050
DMW3-0910	155	<1.00	0.041
DMW4-0910	133	50.6	0.028
DMW5-0910	109	<1.00	0.013
DMW6-0910	124	1.25	0.020
DMW7-0910	169	2.51	0.028
DMW8-0910	127	1.25	0.026
DMW9-0910	311	<1.00	0.027
DMW10-0910	93.0	<1.00	0.021

AQUATIC RESEARCH INCORPORATED

LABORATORY & CONSULTING SERVICES

3927 AURORA AVENUE NORTH, SEATTLE, WA 98103

PHONE: (206) 632-2715 FAX: (206) 632-2417

CASE FILE NUMBER: FBI007-08 **PAGE 3**

REPORT DATE: 09/29/10 REVISED 10/18/10

DATE SAMPLED: 09/14/10 **DATE RECEIVED:** 09/15/10

FINAL REPORT, LABORATORY ANALYSIS OF SELECTED PARAMETERS ON WATER SAMPLES FROM FRIEDMAN & BRUYA, INC. / PROJECT NO. 009133

QA/QC DATA

QC PARAMETER	ALKALINITY (mgCaCO3/L)	SULFATE (mg/L)	NITRATE (mg/L)
METHOD	SM18 2320B	SM184500SO4E	SM184500N03F
DATE ANALYZED	09/27/10	09/29/10	09/15/10
DETECTION LIMIT	1.00	1.00	0.010
DUPLICATE			
SAMPLE ID	DMW10-0910	DMW10-0910	DMW10-0910
ORIGINAL	93.0	<1.00	0.021
DUPLICATE	93.1	<1.00	0.022
RPD	0.13%	NC	4.65%
SPIKE SAMPLE			
SAMPLE ID		DMW10-0910	DMW10-0910
ORIGINAL		<1.00	0.021
SPIKED SAMPLE		10.5	0.193
SPIKE ADDED		10.0	0.200
% RECOVERY	NA	105.30%	85.91%
QC CHECK			
FOUND	101	9.93	0.400
TRUE	100	10.0	0.408
% RECOVERY	101.00%	99.27%	98.09%
BLANK	NA	<1.00	<0.010

RPD = RELATIVE PERCENT DIFFERENCE.
NA = NOT APPLICABLE OR NOT AVAILABLE.
NC = NOT CALCULABLE DUE TO ONE OR MORE VALUES BEING BELOW THE DETECTION LIMIT.
OR = RECOVERY NOT CALCULABLE DUE TO SPIKE SAMPLE OUT OF RANGE OR SPIKE TOO LOW RELATIVE TO SAMPLE CONCENTRATION.

SUBMITTED BY:

Steven Lazoff
Laboratory Director

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

FB1007.08

Page # 1 of 2

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 3012 16th Ave W

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 Fax # (206) 283-5044

SUBCONTRACTER

PROJECT NAME/NO. 009133

PO # A-603

REMARKS

Please Email Results
merdahl@friedmanandbruya.com

TURNAROUND TIME
☑ Standard (2 Weeks)
☐ RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	Oil and Grease	EPH	VPH	Nitrate	Sulfate	Alkalinity					Notes
						ANALYSES REQUESTED										
MW5-0910		9/14/10	1240	W					X	X	X					
MW8-0910			1650													
MW9-0910			1950													
MW10-0910			1630													
MW11-0910			1820													
MW12-0910			1455													
MW13-0910			1900													
MW14-0910			1735													
~~DMW3~~-0910			1710													
DMW4-0910			1346													
DMW5-0910			1805													
DMW6-0910			2048													
DMW7-0910			1602													

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Michael Erdahl	Friedman & Bruya	9/15/10	12:40
Received by:		S-Higgins	FBI	9/15/10	1400
Relinquished by:					
Received by:					

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

FB1007-08

Page # 2 of 2

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 3012 16th Ave W

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 Fax # (206) 283-5044

SUBCONTRACTER	
PROJECT NAME/NO.	PO #
009133	A-603
REMARKS	
Please Email Results merdahl@friedmanandbruya.com	

TURNAROUND TIME
- [x] Standard (2 Weeks)
- [ ] RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
- [ ] Dispose after 30 days
- [ ] Return samples
- [ ] Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED: Oil and Grease	EPH	VPH	Nitrate	Sulfate	Alkalinity					Notes
DMW8-0910		9/14/10	1144	W					x	x	x					
DMW 9-0910		"	1835	"					"	"	"					
DMW 10-0910		"	1745	"					"	"	"					

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Michael Erdahl	Friedman & Bruya	9/15/10	12:40
Received by:		S. Higgins	AM	9/15/10	1240
Relinquished by:					
Received by:					

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

Fremont Analytical

2930 Westlake Ave N Suite 100
Seattle, WA 98109
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Friedman and Bruya, Inc.
Attn: Michael Erdahl
3012 16th Ave W.
Seattle, WA 98119

RE: 009133
Fremont Project No: CHM100916-7

September 23rd, 2010

Michael:

Enclosed are the analytical results for the ***009133*** water samples submitted to Fremont Analytical on September 16th, 2010.

Examination of these samples was conducted for the presence of the following:

- ***Dissolved Gases by RSK-175***

This application was performed under Washington State Department of Ecology accreditation parameters. All appropriate Quality Assurance / Quality Control method parameters have been applied.

Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical!

Sincerely,

Michael Dee
Sr. Chemist / Principal
mikedee@fremontanalytical.com

Fremont Analytical

2930 Westlake Ave . N., Suite 100
Seattle, WA 98109

T: 206.352.3790
F: 206-352-7178
email: info@fremontanalytical.com

Analysis of Dissolved Gases by RSK-175

Project: 009133
Client: Friedman and Bruya, Inc.
Client Project #: A-604
Lab Project #: CHM100916-7

RSK-175 (mg/L)	MRL	Method Blank	LCS	MW5-0910	MW8-0910	MW8-0910 Duplicate	RPD %	MW9-0910
Date Extracted		9/17/10	9/17/10	9/17/10	9/17/10	9/17/10		9/17/10
Date Analyzed		9/17/10	9/17/10	9/17/10	9/17/10	9/17/10		9/17/10
Matrix				Water	Water	Water		Water
Methane	0.005	nd	107%	**0.027**	**0.300**	**0.343**	13%	**0.020**

"nd" Indicates not detected at listed reporting limits
"int" Indicates that interference prevents determination
* Instrument Detection Limit
"J" Indicates estimated value
"MRL" Indicates Method Reporting Limit
"LCS" Indicates Laboratory Control Sample
"RPD" Indicates Relative Percent Difference

Acceptable RPD is determined to be less than 30%
Acceptable Recovery Limits:
LCS, LCSD = 80% to 120%
Spike Concentration = 100 PPMV

Fremont Analytical

2930 Westlake Ave . N., Suite 100
Seattle, WA 98109

T: 206.352.3790
F: 206-352-7178
email: info@fremontanalytical.com

Analysis of Dissolved Gases by RSK-175

Project: 009133
Client: Friedman and Bruya, Inc.
Client Project #: A-604
Lab Project #: CHM100916-7

RSK-175 (mg/L)	MRL	MW10-0910	MW11-0910	MW11-0910 Duplicate	RPD %	MW12-0910	MW13-0910
Date Extracted		9/17/10	9/17/10	9/17/10		9/17/10	9/17/10
Date Analyzed		9/17/10	9/17/10	9/17/10		9/17/10	9/17/10
Matrix		Water	Water	Water		Water	Water
Methane	0.005	**0.882**	**0.034**	**0.034**	0%	**0.033**	**0.052**

"nd" Indicates not detected at listed reporting limits
"int" Indicates that interference prevents determination
* Instrument Detection Limit
"J" Indicates estimated value
"MRL" Indicates Method Reporting Limit
"LCS" Indicates Laboratory Control Sample
"RPD" Indicates Relative Percent Difference

Acceptable RPD is determined to be less than 30%
Acceptable Recovery Limits:
LCS, LCSD = 80% to 120%
Spike Concentration = 100 PPMV

Fremont Analytical

2930 Westlake Ave . N., Suite 100
Seattle, WA 98109

T: 206.352.3790
F: 206-352-7178
email: info@fremontanalytical.com

Analysis of Dissolved Gases by RSK-175

Project: 009133
Client: Friedman and Bruya, Inc.
Client Project #: A-604
Lab Project #: CHM100916-7

RSK-175 (mg/L)	MRL	MW14-0910	DMW3-0910	DMW4-0910	DMW5-0910	DMW6-0910
Date Extracted		9/17/10	9/17/10	9/17/10	9/17/10	9/17/10
Date Analyzed		9/17/10	9/17/10	9/17/10	9/17/10	9/17/10
Matrix		Water	Water	Water	Water	Water
Methane	0.005	nd	**0.178**	**0.413**	**0.336**	**0.882**

"nd" Indicates not detected at listed reporting limits
"int" Indicates that interference prevents determination
* Instrument Detection Limit
"J" Indicates estimated value
"MRL" Indicates Method Reporting Limit
"LCS" Indicates Laboratory Control Sample
"RPD" Indicates Relative Percent Difference

Acceptable RPD is determined to be less than 30%
Acceptable Recovery Limits:
LCS, LCSD = 80% to 120%
Spike Concentration = 100 PPMV

Fremont Analytical

2930 Westlake Ave . N., Suite 100
Seattle, WA 98109

T: 206.352.3790
F: 206-352-7178
email: info@fremontanalytical.com

Analysis of Dissolved Gases by RSK-175

Project: 009133
Client: Friedman and Bruya, Inc.
Client Project #: A-604
Lab Project #: CHM100916-7

RSK-175 (mg/L)	MRL	DMW7-0910	DMW8-0910	DMW9-0910	DMW10-0910
Date Extracted		9/17/10	9/17/10	9/17/10	9/17/10
Date Analyzed		9/17/10	9/17/10	9/17/10	9/17/10
Matrix		Water	Water	Water	Water
Methane	0.005	**0.822**	**0.358**	**2.16**	**3.73**

"nd" Indicates not detected at listed reporting limits
"int" Indicates that interference prevents determination
* Instrument Detection Limit
"J" Indicates estimated value
"MRL" Indicates Method Reporting Limit
"LCS" Indicates Laboratory Control Sample
"RPD" Indicates Relative Percent Difference

Acceptable RPD is determined to be less than 30%
Acceptable Recovery Limits:
LCS, LCSD = 80% to 120%
Spike Concentration = 100 PPMV

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

CHVM00916-7Z

Page # ____ of ____

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 3012 16th Ave W

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 Fax # (206) 283-5044

SUBCONTRACTER

PROJECT NAME/NO. 099133

PO # A604

REMARKS

Please Email Results
merdahl@friedmanandbruya.com

TURNAROUND TIME
☑ Standard (2 Weeks)
☐ RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED: Oil and Grease	EPH	VPH	Nitrate	Sulfate	Alkalinity	Dissolved Methane			Notes
MW5-0910		9/14/10	1240	W								X			
MW8-0910			1650												
MW9-0910			1950												
MW10-0910			1630												
MW11-0910			1520												
MW12-0910			1455												
MW13-0910			1900												
MW14-0910			1735												
~~DMW3~~-0910			1710												
DMW4-0910			1346												
DMW5-0910			1805												
DMW6-0910			2048												
DMW7-0910			1002												

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Michael Erdahl	Friedman & Bruya	9/15/10	12:40
Received by:		Troy Zehr	F.A.	9/16/10	12:30
Relinquished by:					
Received by:					

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

CHm100816-72

Page # ____ of ____

Send Report To: Michael Erdahl

Company: Friedman and Bruya, Inc.

Address: 3012 16th Ave W

City, State, ZIP: Seattle, WA 98119

Phone #: (206) 285-8282 Fax #: (206) 283-5044

SUBCONTRACTER

PROJECT NAME/NO.	PO #
009133	A-604

REMARKS

Please Email Results
merdahl@friedmanandbruya.com

TURNAROUND TIME
- ☒ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED: Oil and Grease	EPH	VPH	Nitrate	Sulfate	Alkalinity	Dissolved Methane *				Notes
DMW8-0910		9/14/10	1144	W								*				
DMW 9-0910		"	1235	"								"				
DMW 10-0910		"	1745	"								"				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Michael Erdahl	Friedman & Bruya	9/15/10	12:40
Received by:		Troy Zehr	F.A.	9/16/10	12:30
Relinquished by:					
Received by:					

009133

SAMPLE CHAIN OF CUSTODY ME 09/15/10

CP 9/14/10 V4/BT4

Page # 1 of 2

Send Report To MIKE STATON

Company SLR INTERNATIONAL CORP

Address 22118 20TH AVE SE, G-202

City, State, ZIP BOTHELL, WA 98021

Phone # (425) 402-8800 Fax # (425) 402-8488

SAMPLERS (signature)

PROJECT NAME/NO. Former ARCO # 0855, Longview, WA 101.00173.00010

PO # 101.00173.00010

REMARKS

TURNAROUND TIME
- [X] Standard (2 Weeks)
- [ ] RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- [X] Dispose after 30 days
- [ ] Return samples
- [ ] Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Dissolved manganese by 200.8	Alkalinity by SM2330	Dissolved methane by RSK-175	Sulfate by 375.2	Nitrate by 353.2		Notes
MW5-0910	01 AG	9/14/10	1240	Water	7		X	X				X	X	X	X	X		
MW8-0910	02 AG		1650															
MW9-0910	03 AG		1950															
MW10-0910	04 AG		1630															
MW11-0910	05 AG		1820															
MW12-0910	06 AG		1455															
MW13-0910	07 AG		1900															
MW14-0910	08 AG		1735															
DMW3-0910	09 AG		1710															
DMW4-0910	10 AG		1346															

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		CHRIS LEE	SLR	9/15/10	1050
Received by:	AT	AT		"	1050
Relinquished by:		Samples received at 1 °C			
Received by:		Nhan Phan	FEDEX	9/15/10	1200

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009133

SAMPLE CHAIN OF CUSTODY ME 09/15/10 V4/BI4

Send Report To MIKE STATON

Company SLR INTERNATIONAL CORP

Address 22118 20TH AE SE, G-202

City, State, ZIP BOTHELL, WA 98021

Phone # (425) 402-8800 Fax # (425) 402-8488

SAMPLERS (signature)

PROJECT NAME/NO. Former ARCO # 0355, Longview, WA 101.00173.00010

PO # 101.00173.00010

REMARKS

TURNAROUND TIME
- [x] Standard (2 Weeks)
- [ ] RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
- [x] Dispose after 30 days
- [ ] Return samples
- [ ] Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Dissolved manganese by 200.8	Alkalinity by SM2320	Dissolved methane by RSK-175	Sulfate by 375.2	Nitrate by 353.2		Notes
DMW5-0910	11 AG	9/14/10	1805	Water	7		X	X				X	X	X	X	X		
DMW6-0910	12 AG	↓	2048	↓	↓		↓	↓				↓	↓	↓	↓	↓		
DMW7-0910	13 AG	↓	1602	↓	↓		↓	↓				↓	↓	↓	↓	↓		
DMW8-0910	14 AG	↓	1144	↓	↓		↓	↓				↓	↓	↓	↓	↓		
DMW9-0910	15 AG	↓	1835	↓	↓		↓	↓				↓	↓	↓	↓	↓		Effervescent water, hard to fill VOAs
DMW10-0910	16 AG	↓	1745	↓	↓		↓	↓				↓	↓	↓	↓	↓		

Samples received at 1 °C

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	CHRIS LEE	SLR	9/15/10	1050
Received by: A	A	Chmf	"	1050
Relinquished by:				
Received by:	Nhan Phan	FeBI	9/15/10	1200

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