



GROUP SERVICES LLC

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**GROUNDWATER MONITORING REPORT
(Second Quarter 2016)**


**Phillips 66 Facility No. 255353 (AOC #1396)
600 Westlake Avenue North
Seattle, Washington
Washington State Department of Ecology VCP No. NW1714**

**Submitted to:
Mr. Roger Nye
Washington State Department of Ecology
3190 160th Avenue Southeast
Bellevue, Washington 98008-5452**

**Submitted on behalf of:
Ed Ralston
Phillips 66 Company
Remediation Management
76 Broadway
Sacramento, California 95818**

**Submitted by:
ATC Group Services LLC
6347 Seaview Avenue Northwest
Seattle, Washington 98107**

**Cardno ATC Project No. Z076000073
September 26, 2016**


**Kyle Sattler, L.G.
Senior Project Manager**



KYLE RAYMOND SATTLER

GROUNDWATER MONITORING REPORT

(Second Quarter 2016)

Phillips 66 Facility No. 255353 (AOC #1396)

600 Westlake Avenue North

Seattle, Washington

SITE INFORMATION:

ATC Contact Person:	Kyle Sattler
Date of previous sampling event:	12/07/15 and 12/08/15
Current remediation technique(s):	Soil Vapor Extraction/Air Sparge (System currently not active).
Ecology VCP Number:	NW1714

FIELD ACTIVITY:

Date(s) monitored and/or sampled:	06/28/16
Wells monitored:	Seven (SMW-3, MWR-1, MWR-5, MWR-6, MW-213, MW-216 and MW-217). Could not locate MW-45. Could not open monument cover on MW-211 (due to bent bolt), making the well inaccessible.
Wells sampled:	Five (MWR-5, MWR-6, MW-213, MW-216 and MW-217).
Purging method:	Wells were purged prior to sampling using low flow pumping via a peristaltic pump and dedicated polyethylene tubing.
Sampling method:	Samples were collected using peristaltic pump and dedicated polyethylene tubing.

SITE HYDROGEOLOGY:

Minimum depth to groundwater (feet below top of casing [TOC]):	9.09 (SMW-3)
Maximum depth to groundwater (feet below TOC):	13.01 (MW-216)
Average groundwater elevation (feet above mean sea level):	14.21 (wells SMW-3, MWR-1, MWR-5, MWR-6, MW-213, MW-216 and MW-217)
Change in average groundwater elevation since previous monitoring event (feet):	-4.37 (wells SMW-3, MWR-1, MWR-5, MWR-6, MW-213, MW-216 and MW-217)
Approximate groundwater gradient/flow direction:	0.002 / Southeast
Previous groundwater gradient/flow direction:	0.04 / Northeast south of site; regionally to the north-northeast

GROUNDWATER CONDITIONS (6/28/16):

Minimum dissolved phase gasoline-range hydrocarbons concentration excluding "non-detects" (micrograms per liter [$\mu\text{g/L}$):	10,800 (MWR-5)
Maximum dissolved phase gasoline-range hydrocarbons concentration ($\mu\text{g/L}$):	10,800 (MWR-5)
Maximum dissolved phase gasoline-range hydrocarbons concentration ($\mu\text{g/L}$) observed previous sampling event:	748 (MW-45)
Minimum dissolved phase benzene concentration excluding "non-detects" ($\mu\text{g/L}$):	2.3 (MW-213)
Maximum dissolved phase benzene concentration ($\mu\text{g/L}$):	14.9 (MWR-5)
Maximum dissolved phase benzene concentration ($\mu\text{g/L}$) observed previous sampling event:	10.3 (MW-216)
Minimum dissolved phase ethylbenzene concentration excluding "non-detects" ($\mu\text{g/L}$):	5.5 (MW-213)
Maximum dissolved phase ethylbenzene concentration ($\mu\text{g/L}$):	232 (MWR-5)
Maximum dissolved phase ethylbenzene concentration ($\mu\text{g/L}$) observed previous sampling event:	20.3 (MW-45)
Minimum dissolved phase toluene concentration excluding "non-detects" ($\mu\text{g/L}$):	All wells were "non-detect"
Maximum dissolved phase toluene concentration ($\mu\text{g/L}$):	All wells were "non-detect"
Maximum dissolved phase toluene concentration ($\mu\text{g/L}$) observed previous sampling event:	All wells sampled were "non-detect"
Minimum dissolved phase total xylenes concentration excluding "non-detects" ($\mu\text{g/L}$):	3.2 (MW-213)
Maximum dissolved phase total xylenes concentration ($\mu\text{g/L}$):	519 (MWR-5)

GROUNDWATER MONITORING REPORT

(Second Quarter 2016)

Phillips 66 Facility No. 255353 (AOC #1396)

600 Westlake Avenue North

Seattle, Washington

Maximum dissolved phase total xylenes concentration ($\mu\text{g/L}$) observed previous sampling event:	3.4 (MW-45)
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ADDITIONAL INFORMATION AND COMMENTS:

Gasoline-range hydrocarbons, and benzene, toluene, ethylbenzene, and total xylenes (BTEX) were either not detected or were detected at concentrations less than the MTCA Method A cleanup levels in all of the samples submitted for analysis during this sampling event, with the exception of gasoline-range hydrocarbons and benzene detected in the sample collected from MWR-5. Well MW-45 could not be located during this sampling event, and well MW-211 was inaccessible due to a bent bolt preventing the monument lid from opening.

Purge water generated during the June 2016 groundwater monitoring and sampling event was placed in the AS/SVE system holding tank, to be treated through the liquid carbon vessels prior to discharge to the City's sewer system.

As noted above and shown on Figure 1, the groundwater flow direction determined during this monitoring and sampling event is toward the southeast. This is inconsistent with previous monitoring events, in which the groundwater flow direction has predominantly been toward the north-northeast. The depths to water and groundwater flow direction are likely influenced by the presence of native soil and fill materials on and off-site and the presence of subsurface hydrogeologic barriers installed during the remedial excavation activities completed in 2008. The elevation of the water surface in south Lake Union (approximately 500 feet north of the Site) may also influence the direction of the groundwater flow beneath the site.

ATC is continuing to evaluate the quarterly groundwater monitoring and sampling data trends and results of the previous "high intensity targeted" (HIT) source removal events. Additional HIT source removal events and/or remediation system restart may be implemented in the future if determined warranted. All of the wells will be gauged and sampled during the next groundwater monitoring and sampling event scheduled for the second semester of 2016.

ATTACHMENTS:

Table 1 Summary of Historical Groundwater Gauging and Laboratory Analytical Data

Figure 1 Groundwater Conditions Map (6/28/16)

Figure 2 Groundwater Analytical Map (6/28/16)

Appendix A Laboratory Analytical Data Report and Chain of Custody Document

Appendix B Field Report / Groundwater Gauging & Sampling Logs

TABLE

Table 1
Summary of Historical Groundwater Gauging and Laboratory Analytical Data
 Phillips 66 Site No. 255353 (AOC 1396)
 600 Westlake Avenue North
 Seattle, Washington

Sample I.D.	Sample Date	TPH-Gasoline (µg/L)	TPH-Diesel (µg/L)	TPH-Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)	EDB (µg/L)	EDC (µg/L)	Kerosene (µg/L)	DTW (feet)	SPH (feet)	GWE (feet)		
MW-41 27.00	11/05/91	<1,000	<1,000	--	67	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--		
	12/29/93	<100	<250	<750	4.6	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	11.24	0.00	15.76		
	07/14/94	<100	<250	<750	10	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	10.81	0.00	16.19		
	10/25/94	<50	500	<750	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	13.69	0.00	13.31		
	03/08/95	<50	<250	<750	1.6	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	14.72	--	12.28		
	06/06/95	<50	<250	<750	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	15.02	--	11.98		
	09/07/95	<50	<250	<750	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	15.00	--	12.00		
	12/08/95	<50	<250	<750	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	16.30	--	10.70		
	04/01/96	<50	<250	<750	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	15.02	--	11.98		
	06/25/96	<50	<250	<750	<0.5	<0.5	<0.5	<1.00	--	--	--	--	--	--	--	15.07	--	11.93		
	09/27/96	<50	<250	<750	<0.5	<0.5	<0.5	<1.00	--	--	--	--	--	--	--	15.42	0.00	11.58		
	03/28/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15.27	0.00	11.73		
	06/30/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NM	NM	--		
	06/02/05	<100	<237	<474	<1	<1	<1	<2	<1	--	--	--	--	--	--	15.48	0.00	11.52		
	07/26/05	<50	258 ^e	977	<0.2	<0.2	<0.2	<0.50	<1	<0.5	--	--	--	--	--	15.88	0.00	--		
	36.25	11/02/05	<50	<238	<476	<0.5	<0.5	<0.5	<3.00	<1	--	--	--	--	--	--	15.89	0.00	20.36	
		02/23/06	<50	<250	<500	<0.5	<0.5	<0.5	<3.00	<1	<1	1.32	--	--	--	--	15.26	0.00	20.99	
		05/09/06	<50	<253	<505	<0.5	<0.5	<0.5	<3.00	<1	<1	1.56	--	--	--	--	15.47	0.00	20.78	
		08/30/06	<80	<240	<481	<0.5	<0.5	<0.5	<3.00	<1	<5	<1	--	--	--	--	15.90	0.00	20.35	
		12/12/06	<50	<243	<485	<0.5	<0.5	<0.5	<3.00	<1	<5	8.79	--	--	--	--	15.81	0.00	20.44	
03/07/07		<50	<263	<526	<0.5	<0.5	<0.5	<3.00	<1	<5	<1	--	--	--	--	15.38	0.00	20.87		
06/14/07		79.2	<236	<472	<0.5	<0.5	<0.5	<3.00	<1	<5	<1	--	--	--	--	15.45	0.00	20.80		
09/13/07		<50	<236	<472	<0.5	<0.5	<0.5	<3.00	<1	<5	2.56	--	--	--	--	15.61	0.00	20.64		
12/18/07		<50	<236	<472	<1	<1	<1	<3	<1	<1	2.73	--	--	--	--	15.46	0.00	20.79		
03/17/08		<50	<236	<472	<236	<0.5	<0.5	<0.5	<3	<1	<5	<1	--	--	<1	15.33	--	20.92		
06/03/08		<50	<236	<472	<0.5	<0.5	<0.5	<3	<1	<5	<1	<1	--	--	<236	15.31	0.00	20.94		
08/04/08		<50	<236	<472	<0.5	<0.5	<0.5	<3	<1	<5	<1	<1	--	--	<236	15.59	0.00	20.66		
11/04/08		<50.0	<245	<490	<0.500	<0.500	<0.500	<3.00	<1.00	<5.00	<1.00	<1.00	--	--	<245	15.80	0.00	20.45		
02/24/09		<50.0	<240	<481	<0.500	<0.500	<0.500	<3.00	--	<5.00	<1.00	<1.00	--	--	<240	15.60	0.00	20.65		
05/17/09		<50.0	<250	<500	<0.500	<0.500	<0.500	<3.00	<1.00	<5.00	2.05	<1.00	--	--	<250	15.78	0.00	20.47		
08/16/09		<50	470	<480	<0.50	<0.50	<0.50	<2.0	<1.0	<5.0	<5.0	<5.0	--	--	<240	16.25	0.00	20.00		
11/15/09		<50	<280	<560	<0.50	<0.50	<0.50	<2.0	<1.0	<5.0	--	--	--	--	<280	16.50	0.00	19.75		
02/21/10		<50.0	98.4	<379	<1.0	<1.0	<1.0	<3.0	--	<1.0	1.8	<0.10	--	--	<75.8	15.50	0.00	20.75		
05/23/10		<50.0	<76.9	<385	<1.0	<1.0	<1.0	<3.0	--	<1.0	0.35	<0.10	--	--	<76.9	15.42	0.00	20.83		
08/16/10		Unable to gauge and sample; Well damaged.																		
36.09		11/15/10	<50.0	<77.7	<388	<1.0	1.8	<1.0	<3.0	--	<1.0	<10.0	<10.0	--	--	<77.7	15.24	0.00	21.01	
		02/28/11	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	--	--	<77.7	15.09	0.00	21.16		
		06/14/11	<50.0	<82.5	<412	<1.0	<1.0	<1.0	<3.0	--	--	0.51	<0.10	--	--	--	15.13	0.00	21.12	
		08/29/11	<50.0	<84.2	<421	<1.0	<1.0	<1.0	<3.0	--	<1.0	<0.10	<0.10	--	--	<84.2	15.19	0.00	21.06	
		12/05/11	<50.0	<85.1	<426	<1.0	<1.0	<1.0	<3.0	--	<10.0	0.16	0.11	--	--	<85.1	15.32	0.00	20.93	
		02/15/12	<50.0	<76.2	<381	<1.0	<1.0	<1.0	<3.0	--	2.0	<10.0	<10.0	--	--	<76.2	15.19	0.00	21.06	
		05/16/12	<50.0	<81.6	<408	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0	--	--	<81.6	14.92	0.00	21.33	
		08/14/12	<50.0	<88.9	<444	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0	--	--	<88.9	15.10	0.00	21.15	
	11/20/12	<50.0	<100	<100	<1.0	<1.0	<1.0	<3.0	--	<4.0	14.8	7.1	--	--	<100	15.19	0.00	21.06		
	11/07/13	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	--	--	--	15.69	0.00	20.56		
	07/29/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.010	<1.0	--	15.72	0.00	20.53		
	12/09/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.0099	<1.0	--	15.70	0.00	20.39		
	03/23/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	15.42	0.00	20.67		
	06/22/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	15.57	0.00	20.52		
	09/10/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	15.81	0.00	20.28		
	12/07/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	10.58	0.00	25.51		
	06/28/16	Not Gauged or Sampled.																		

Table 1
Summary of Historical Groundwater Gauging and Laboratory Analytical Data
Phillips 66 Site No. 255353 (AOC 1396)
600 Westlake Avenue North
Seattle, Washington

Sample I.D.	Sample Date	TPH-Gasoline (µg/L)	TPH-Diesel (µg/L)	TPH-Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)	EDB (µg/L)	EDC (µg/L)	Kerosene (µg/L)	DTW (feet)	SPH (feet)	GWE (feet)					
MW-45 18.11	11/04/91	17,000	2,000	--		500	1,000	370	2,300	--	--	--	--	--	--	--	--	--					
	12/29/93	11,000	1,100	860		2,900	760	680	3,000	--	--	--	--	--	--	8.79	0.00	9.32					
	04/07/94	16,000	830	<750		2,500	620	580	2,500	--	--	--	--	--	--	8.22	0.00	-8.22					
	07/14/94	25,000	850	1,100		4,000	750	870	3,600	--	--	--	--	--	--	8.39	0.00	9.72					
	10/25/94	19,000	1,000	<750		2,600	230	920	3,000	--	--	--	--	--	--	9.10	0.00	9.01					
	09/07/01*	<50	375	<606		<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	9.80	0.00	8.31					
	10/10/01	--	--	--		--	--	--	--	--	--	--	--	--	--	NM	NM	--					
	12/28/01	17,300	2,210	597		2,130	73.4	1,330	2,970	--	--	--	--	--	--	9.03	0.00	9.08					
	03/08/02	15,500	2,380	686		2,090	38.4	1,190	1,650	--	--	--	--	--	--	9.12	0.00	8.99					
	06/24/02	5,100	1,920	761		1,330	6.39	451	235	--	--	--	--	--	--	9.00	0.00	9.11					
	09/26/02*	2,420	1,190	547		394	3.41	204	106	--	--	--	--	--	--	10.20	0.00	7.91					
	12/12/02	--	--	--		--	--	--	--	--	--	--	--	--	--	NM	NM	--					
	03/13/03	3,590	2,050	<500		219	133	99.4	368	--	--	--	--	--	--	8.05	0.00	10.06					
	06/12/03	10,700	1,470	<575		1,350	10.8	954	631	--	--	--	--	--	--	9.16	0.00	8.95					
	09/19/03	583	<298	<595		1.93	2.25	5.65	38.6	--	--	--	--	--	--	10.68	0.00	7.43					
	01/14/04	360	<118	<236		4.97	<0.5	2.48	1.01	--	--	--	--	--	--	10.12	0.00	7.99					
	03/30/04	303	234	<240		<1	<1	<1	<2	--	--	--	--	--	--	10.19	0.00	7.92					
	06/22/04	151	365	358		<1	<1	<1	<2	--	--	--	--	--	--	10.34	0.00	7.77					
	09/29/04	270	<251	<503		<0.5	1.5	0.62	7.3	--	--	--	--	--	--	10.40	0.00	7.71					
	12/29/04	207	<249	<498		2.90	<1	<1	9.04	--	--	--	--	--	--	9.40	0.00	8.71					
	03/17/05	235	<239	<477		5.61	1.08	2.49	19.1	--	--	--	--	--	--	9.44	0.00	8.67					
	06/01/05	793	283 ^l	<491 ^l		17.1	37.9	13.9	83.8	<1	--	--	--	--	--	8.62	0.00	9.49					
	07/25/05	564	<250	<500		18.6	14.6	16.7	113.2	<1	7.51	--	--	--	--	8.98	0.00	--					
11/01/05	100	<240	<481		<0.200	<0.5	<0.5	<1	<2	--	--	--	--	--	9.81	0.00	17.71						
02/21/06	484	<275	<549		5.13	<0.5	7.65	36.5	<1	3.77	1.30	--	--	--	8.83	0.00	18.69						
05/08/06	198	540	<500		1.06	<0.5	0.980	2.70	<1	1.69	<1	--	--	--	8.79	0.00	18.73						
08/30/06	104	<248	<495		<0.5	<0.5	<0.500	<3	<1	<5	<1	--	--	--	9.84	0.00	17.68						
12/12/06	25,900	662	<485		64.1	23.8	330	5,020	<5	278	10.8	--	--	--	9.13	0.00	18.39						
03/06/07	1,680	<260	<521		<0.5	<0.5	22.0	139	<1	54	<1	--	--	--	8.75	0.00	18.77						
06/15/07	12,500	439	<481 ^l		16.8	2.77	178	1,590	<1	330	1.77	--	--	--	8.85	0.00	18.67						
09/13/07	23,400	328	<481		65.3	16.9	303	3,740	<1	246	6.85	--	--	--	9.07	0.00	18.45						
12/17/07					Unable to sample, well under water												--	--	--				
03/18/08	<50	<236	<472	<236	<0.5	<0.5	<0.5	<3	<1	<5	<1			<1	8.30	0.00	19.22						
06/03/08					Unable to sample, well under water												--	--	--				
08/05/08	64.4	<236	<472	<0.5	<0.5	<0.5	<3	<1	<5	1.39	<1			<236	8.90	0.00	18.62						
11/03/08					Well under water, unable to sample.												--	--	--				
02/22/09	53.2	<236	<472	<0.500	<0.500	<0.500	<3.00	--	15.0	<1.00	<1.00			<236	11.44	0.00	8.38						
05/17/09	176.0	428	<476	<0.500	<0.500	<0.500	<3.00	<1.00	97.9	<1.00	<1.00			431	16.67	0.00	10.85						
08/16/09	250	570	<480	<0.50	<0.50	<0.50	<2.0	<1.0	100	<5.0	<5.0			1200	16.92	0.00	10.60						
11/15/09	1000	2,200 ^y	<480	3.9	2.2	11	28	<1.0	14	9.2	<1			2,100 ^y	9.12	0.00	18.40						
02/21/10	745	1,160	832	3.9	<1.0	34	23.2	--	14.5	4.7	<0.10			566	8.46	0.00	19.06						
05/23/10	398	692	449	1.3	<1.0	14.5	4	--	7.9	3.1	<0.10			665	8.15	0.00	19.37						
08/16/10	319	<77.7	<388	<1.0	<1.0	5.8	<3.0	--	7.5	7.2	0.37			177	8.80	0.00	18.72						
11/16/10	1,880	106	<388	5.8	1.3	43.1	212	--	28.4	<10.0	<10.0			547	8.15	0.00	19.37						
02/28/11	10,500	347	<388	17.6	3.3	172.0	479	--	150.0	<10.0	--			2,750	8.66	0.00	18.86						
06/14/11	3,230	137	<396	1.7	<1.0	46.8	34	--	--	1.8	<0.10			--	8.85	0.00	18.67						
08/29/11	1,790	119	<421	<1.0	<1.0	5.1	<3.0	--	36.5	0.4	<0.10			489	8.62	0.00	18.90						
12/05/11	19,900	298	<426	20.5	5.7	327	2,240	--	213	2.1	0.34			6,960	7.80	0.00	19.72						
02/15/12	14,000	219	<404	11.6	2.7	203	631	--	206.0	<10.0	<10.0			2,470	9.05	0.00	18.47						
05/15/12	3,920	211	<421	<5.0	<5.0	77.0	122	--	75.4	<10.0	<10.0			1,330	8.14	0.00	19.38						
08/14/12	1,600	206	<430	<1.0	<1.0	7.3	<3.0	--	33.7	<10.0	<10.0			676	8.78	0.00	18.74						
11/20/12	4,130	1,900	<100	6.0	2.8	105	612	--	99.3	3.7	<3.0			2,500	4.37	--	23.15						
11/06/13	281	<400	<400	<1.0	1.3	<1.0	<3.0	<1.0	--	<10.0	<10.0			<400	10.50	0.00	Note Z						
28.06	07/29/14								Well was dry												--	--	--
27.91	12/08/14	323	--	--	6.2	<1.0	1.6	<3.0	<1.0	--	<10.0	<10.0	<0.0098	<1.0	--	10.95	0.00	16.96					
	03/23/15	917	--	--	2.0	<1.0	20.4	53.8	--	--	--	--	--	--	--	9.23	0.00	18.68					
	06/22/15	474	--	--	5.1	<1.0	18.3	<3.0	--	--	--	--	--	--	--	10.57	0.00	17.34					
	09/10/15	150	--	--	--	--	--	--	--	--	--	--	--	--	--	10.11	0.00	17.80					
	12/07/15	748	--	--	2.1	<1.0	20.3	3.4	--	--	--	--	--	--	--	8.09	0.00	19.82					
	06/28/16									Unable to access well, not gauged or sampled.												--	--

Table 1
Summary of Historical Groundwater Gauging and Laboratory Analytical Data
 Phillips 66 Site No. 255353 (AOC 1396)
 600 Westlake Avenue North
 Seattle, Washington

Sample I.D.	Sample Date	TPH-Gasoline (µg/L)	TPH-Diesel (µg/L)	TPH-Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)	EDB (µg/L)	EDC (µg/L)	Kerosene (µg/L)	DTW (feet)	SPH (feet)	GWE (feet)		
MW-50 TOC *	10/10/01	8,970	2,200	<606		674	221	382	779	--	--	--				11.11	0.00	8.69		
	12/28/01	23,200	3,460	<500		1,630	3,690	991	4,480	--	--	--				10.45	0.00	9.35		
19.80	03/08/02							Obstructed by vehicle										NM	NM	--
	06/24/02	8,290	1,970	556		414	23	314	2,010	--	--	--				10.84	0.00	8.96		
29.32	09/26/02							Obstructed by vehicle										NM	NM	--
	12/12/02							Obstructed by vehicle										NM	NM	--
MW-50	03/13/03	12,200	1,810	<588		733	127	523	1,100	--	--	--				9.93	0.00	9.87		
	06/12/03	6,450	1,740	<500		448	13.7	299	286	--	--	--				11.27	0.00	8.53		
19.80	09/19/03	4,440	<250	<500		51.7	315	26.1	462	--	--	--				12.05	0.00	7.75		
	01/14/04	29,700	1,970	<258		308	502	312	6,180	--	--	--				11.81	0.00	7.99		
MW-50	03/30/04	3,330	867	<241		21.8	<5	21.9	226.4	--	--	--				11.65	0.00	8.15		
	06/22/04	2,130	874	<237		14.2	2.4	27.9	85.11	--	--	--				11.79	0.00	8.01		
29.32	09/29/04	3,600	1,330	<502		92	62	100	520	--	--	--				11.71	0.00	8.09		
	12/29/04	1,570	745	<611		9.69	3.88	9.98	27.62	--	--	--				11.01	0.00	8.79		
MW-50	03/17/05	1,420	1,060	506		5.82	2.41	10.6	30.59	--	--	--				11.26	0.00	8.54		
	06/01/05	1,710	528 ^a	<503		20.3	10.7	42.3	84.7	8.01	--	--				10.58	0.00	9.22		
29.32	07/25/05	1,500	<250	<500		16.8	3.23	36.9	50.11	4.29	7.04	--				10.90	0.00	--		
	11/01/05	634	380 ^b	<472		15.9	2.49	0.52	2.19	5.62	--	--				10.60	0.00	18.72		
MW-50	02/21/06	1,430	<272	<543		139	15.4	16.7	28.20	<5	7.05	1.33				10.56	0.00	18.76		
	05/08/06	1,550 ^c	1,870	<485		28.4	2.13	24.7	35.06	3.88	9.48	<1				10.81	0.00	18.51		
29.32	08/29/06	264	<248	<495		8.55	0.790	6.87	7.26	4.23	<5	<1				11.58	0.00	17.74		
	12/12/06	1,650	<243	<485		80.9	2.75	18.9	41.9	3.93	17.4	1.62				10.61	0.00	18.71		
MW-50	03/08/07	1,650	<240	<481		51.3	1.06	14.1	33.6	2.92	35.9	<1				10.53	0.00	18.79		
	06/15/07	1390 ^d	333	<495 ^e		28.0	1.00	6.46	5.20	1.85	40.5	<1				10.74	0.00	18.58		
29.32	09/13/07	439	<240	<481		4.36	<0.5	0.650	<3	1.89	10.3	<1				10.90	0.00	18.42		
	12/18/07	886	<236	<472		1.10	<1	4	<3	<1	6.9	2.94				9.63	0.00	19.69		
MW-50	03/18/08	77.6	<236	<472		<236	1.02	0.58	1.85	<3	<1	<5	<1			11.39	0.00	17.93		
	06/03/08					Well covered by trailer truck, unable to sample										--	--	--		
29.32	08/05/08	1,260	<236	<472		3.94	0.50	8.42	9.76	2.06	<5	4	<1			494	11.28	0.00	18.04	
	11/03/08	1,250	<236	<472		<0.500	<0.500	3.69	4.84	<1.00	<5.00	<1.00	<1.00			478	10.79	0.00	18.53	
MW-50	11/18/08					Thought to be Decommissioned										--	--	--		
	11/15/09	630	2,900 ^f	<490	2.3	0.74	0.65	<2.0	<1.0	660 ^h	1.1	<1			3000	11.88	0.00	17.44		
29.32	02/21/10	<50.0	1,280	457	<1.0	<1.0	<1.0	4.9	--	62.8	0.61	<0.10			392	11.02	0.00	18.30		
	05/23/10	57.4	1320	433	<1.0	<1.0	<1.0	<3.0	--	60.4	0.92	<0.10			1080	10.72	0.00	18.60		
MW-50	08/16/10	<50.0	158	<392	<1.0	<1.0	<1.0	<3.0	--	33.4	0.63	0.18			181	11.07	0.00	18.25		
	11/16/10	<50.0	102	<388	<1.0	<1.0	<1.0	<3.0	--	35.6	<10.0	<10.0			102	10.43	0.00	18.89		
29.32	02/28/11	74.8	102	<388	<1.0	<1.0	<1.0	<3.0	--	19.2	<10.0	--			114	10.75	0.00	18.57		
	06/14/11	<50.0	<82.5	<412	<1.0	<1.0	<1.0	<3.0	--	--	0.52	<0.10			--	10.06	0.00	19.26		
MW-50	08/29/11	65.1	<86.0	<430	<1.0	<1.0	<1.0	<3.0	--	15	0.19	0.12			88.2	10.65	0.00	18.67		
	12/05/11	71.6	<86.0	<430	<1.0	<1.0	<1.0	<3.0	--	10.2	0.53	<0.10			<86.0	10.15	0.00	19.17		
29.32	02/15/12	85.0	110	<426	<1.0	<1.0	<1.0	<3.0	--	20.5	<10.0	<10.0			154	11.35	0.00	17.97		
	05/15/12	97.9	<80.0	<400	<1.0	<1.0	<1.0	<3.0	--	16.1	<10.0	<10.0			87.3	10.36	0.00	18.96		
MW-50	08/14/12	138	117	<430	<1.0	<1.0	<1.0	<3.0	--	11.4	<10.0	<10.0			143	10.75	0.00	18.57		
	11/20/12	183	180	<100	<1.0	<1.0	<1.0	<3.0	--	6.5	6.4	<3.0			250	8.88	0.00	20.44		
29.32	11/06/13	185	540	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0			530	12.55	0.00	16.77		
	07/29/14					Well contained approximately 0.05 foot of water in well cap; well was not sampled.														
MW-50	12/08/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	14.0	<10.0	<0.0098	<1.0	--	14.07	0.00	14.93		
	03/27/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	12.05	0.00	16.95		
29.32	06/22/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	12.79	0.00	16.21		
	09/10/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	12.54	0.00	16.46		
MW-50	12/07/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	12.01	0.00	16.99		
	06/28/16					Not Gauged or Sampled.														

Table 1
Summary of Historical Groundwater Gauging and Laboratory Analytical Data
 Phillips 66 Site No. 255353 (AOC 1396)
 600 Westlake Avenue North
 Seattle, Washington

Sample I.D.	Sample Date	TPH-Gasoline (µg/L)	TPH-Diesel (µg/L)	TPH-Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)	EDB (µg/L)	EDC (µg/L)	Kerosene (µg/L)	DTW (feet)	SPH (feet)	GWE (feet)	
MW-54 28.00	06/16/05	206	130'	410	4.82	<1	2.09	10.27	<1	--	--	--	--	--	--	9.09	0.00	18.91	
	07/25/05	177	<250	<500	5.26	0.280	0.680	3.11	<1	0.990	--	--	--	--	--	9.51	0.00	18.49	
	11/18/05	75.8	<243	<485	0.560	0.530	4.19	10.8	<1	--	--	--	--	--	--	9.73	0.00	18.27	
	02/23/06	<50	695	<472	<0.5	<0.5	<0.5	<0.5	<1	<1	1.04	--	--	--	--	9.44	0.00	18.56	
	05/08/06	<50	328 ^P	<500	<0.5	<0.5	<0.5	<3	<1	<1	1.41	--	--	--	--	9.31	0.00	18.69	
	08/29/06	<80	<236	<472	<0.5	<0.5	<0.5	<3	<1	<5	<1	--	--	--	--	10.33	0.00	17.67	
	12/12/06	<50	<248	<495	<0.5	<0.5	<0.5	<3	<1	<5	2.69	--	--	--	--	9.69	0.00	18.31	
	03/06/07	<50	<263	<526	<0.5	<0.5	<0.5	<3	<1	<5	<1	--	--	--	--	9.40	0.00	18.60	
	06/15/07	<50	<243	<485'	<0.5	<0.5	<0.5	<3	<1	<5	<1	--	--	--	--	9.25	0.00	18.75	
	09/13/07	<50	<245	<490	<0.5	<0.5	<0.5	<3	<1	<5	<1	--	--	--	--	9.59	0.00	18.41	
	12/18/07	<50	<236	<472	<1	<1	<1	<3	<1	<1	1.13	--	--	--	--	8.53	0.00	19.47	
	03/18/08	<50	<236	<472	<236	<0.5	<0.5	<3	<1	<5	<1	--	--	--	--	9.06	0.00	18.94	
	06/03/08	--	--	--	Unable to sample, well under water												--	--	--
	08/05/08	<50	<236	<472	<0.5	<0.5	<0.5	<3	<1	<5	2.37	<1	--	--	--	<236	9.68	0.00	18.32
	11/03/08	<50	<236	<472	<0.500	<0.500	<3.00	<1.00	<5.00	8.64	<1.00	--	--	--	--	<236	8.72	0.00	19.28
	02/22/09	--	--	--	Well inaccessible: buried under garbage containers.												--	--	--
	05/17/09	--	--	--	Well inaccessible: buried under garbage containers.												--	--	--
	08/16/09	280	<240	<480	<0.50	<0.50	1.4	2.5	<1.0	<5.0	<5.0	<5.0	--	--	--	310	11.78	0.00	16.22
	11/15/09	<50	<240	<470	<0.50	<0.50	<1.0	<1.0	<3.0	<1.0	<5.0	1.8	<1	--	--	<240	9.78	0.00	18.22
	02/21/10	<50.0	178	434	<1.0	<1.0	<1.0	<1.0	<3.0	--	<1.0	1.1	0.24	--	--	<75.8	9.20	0.00	18.80
	05/23/10	<50.0	144	384	<1.0	<1.0	<1.0	<1.0	<3.0	--	<1.0	4.4	0.12	--	--	92.8	8.64	0.00	19.36
	08/16/10	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<1.0	<3.0	--	<1.0	5.7	0.21	--	--	<77.7	9.30	0.00	18.70
	11/17/10	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0	--	--	<77.7	8.76	0.00	19.24
	02/28/11	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0	--	--	<77.7	9.23	0.00	18.77
	06/14/11	<50.0	<84.2	<421	<1.0	<1.0	<1.0	<1.0	<3.0	--	1.2	<0.10	--	--	--	8.50	0.00	19.50	
	08/29/11	<50.0	<84.2	<421	<1.0	<1.0	<1.0	<1.0	<3.0	--	<1.0	0.58	<0.10	--	--	<84.2	9.13	0.00	18.87
	12/05/11	<50.0	<84.2	<421	<1.0	<1.0	<1.0	<1.0	<3.0	--	<10.0	0.70	0.18	--	--	<84.2	8.90	0.00	19.10
	02/16/12	<50.0	<75.8	<379	<1.0	<1.0	<1.0	<1.0	<3.0	--	2.4	<10.0	<10.0	--	--	<75.8	9.98	0.00	18.02
	05/15/12	<50.0	<75.5	<377	<1.0	<1.0	<1.0	<1.0	<3.0	--	4.0	<10.0	<10.0	--	--	<75.5	8.38	0.00	19.62
	08/14/12	<50.0	<87.9	<440	<1.0	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0	--	--	<87.9	9.40	0.00	18.60
	11/20/12	<100	<100	<100	<1.0	<1.0	<1.0	<1.0	<3.0	--	<4.0	<3.0	<3.0	--	--	<100	6.89	0.00	21.11
	11/06/13	281	<400	<400	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	--	--	<400	10.43	0.00	Note Z
	28.05	07/29/14	<100	--	--	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.0098	<1.0	--	14.81	0.00
27.88	12/08/14	<100	--	--	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.0098	<1.0	--	11.40	0.00	16.48
	03/23/15	<100	--	--	<1.0	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	9.91	0.00	17.97
	06/22/15	<100	--	--	<1.0	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	10.43	0.00	17.45
	09/10/15	<100	--	--	2.1	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	10.59	0.00	17.29
	12/07/15	<100	--	--	2.9	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	9.60	0.00	18.28
	06/28/16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not Gauged or Sampled.			

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Summary of Historical Groundwater Gauging and Laboratory Analytical Data
 Phillips 66 Site No. 255353 (AOC 1396)
 600 Westlake Avenue North
 Seattle, Washington

Sample I.D.	Sample Date	TPH-Gasoline (µg/L)	TPH-Diesel (µg/L)	TPH-Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)	EDB (µg/L)	EDC (µg/L)	Kerosene (µg/L)	DTW (feet)	SPH (feet)	GWE (feet)
SMW-3 29.03	03/08/95	<50	400	2,500	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	10.25	0.00	--
	06/06/95	<50	<250	<750	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	10.23	0.00	--
	09/07/95	<50	300	<750	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	10.89	0.00	--
	12/08/95	<50	300	<750	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	10.36	0.00	--
	04/01/96	34,000	4,000	2,300	6,400	42	2,100	3,000	--	--	--	--	--	--	--	10.07	0.00	--
	06/25/96	<50	320	<750	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	10.19	0.00	--
	09/27/96	<50	<250	<750	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	11.12	0.00	--
	03/28/97	<50	<250	<750	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	10.19	0.00	--
	06/30/97 ^a	<50	<250	<750	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	10.14	0.00	--
	09/08/97 ^b	<50	<250	<750	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	10.85	0.00	--
	12/19/97 ^b	<50	521	<750	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	9.67	0.00	--
	03/16/98 ^b	50.1	<250	<750	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	9.28	0.00	--
	06/26/98 ^b	<50	500	<750	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	8.87	0.00	--
	09/23/98 ^b	<50	<250	<750	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	9.88	0.00	--
	12/17/98 ^b	<50	293	<750	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	9.22	0.00	--
	03/31/99 ^b	<50	360	<750	<0.5	<0.5	0.53	4.97	--	--	--	--	--	--	--	9.01	0.00	--
	06/30/99 ^b	<50	639	<750	<0.5	0.609	<0.5	1.32	--	--	--	--	--	--	--	9.55	0.00	--
	12/08/99 ^b	<50	<484	<1,450	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	8.75	0.00	--
	06/20/00 ^b	<50	<250	<750	<0.5	0.585	<0.5	1.86	--	--	--	--	--	--	--	8.89	0.00	--
	12/19/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NM	NM	--
	06/15/01 ^a	<50	368	<866	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	7.23	0.00	--
	06/26/01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NM	NM	--
	09/07/01 ^a	<50	385	<571	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	9.19	0.00	--
	10/10/01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NM	NM	--
	12/28/01	<50	1,160	<500	<0.5	0.902	<0.5	2.78	--	--	--	--	--	--	--	8.89	0.00	--
	03/08/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NM	NM	--
	06/24/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NM	NM	--
	09/26/02	<100	<250	<500	1.83	<2	<1.00	<1.5	--	--	--	--	--	--	--	10.32	0.00	--
	12/12/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NM	NM	--
	03/13/03	<50	<250	<500	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	10.99	0.00	--
	06/12/03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NM	NM	--
	09/19/03	<50	<287	<575	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	11.00	0.00	--
	01/14/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NM	NM	--
03/30/04	<100	<119	<238	<1	<1	<1	<2	--	--	--	--	--	--	--	10.42	0.00	--	
06/22/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NM	NM	--	
09/29/04	56	<242	<483	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	11.67	0.00	--	
12/29/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NM	NM	--	
03/17/05	<100	<248	<495	<1	<1	<1	<2	--	--	--	--	--	--	--	11.68	0.00	--	
06/01/05	<100	<249	<498	<1	<1	<1	<2	<1	--	--	--	--	--	--	10.62	0.00	--	
07/25/05	<50	<250	<500	<0.2	<0.2	<0.2	<0.5	<1	<0.5	--	--	--	--	--	11.19	0.00	--	
11/08/05	<50	<236	<472	<0.5	<0.5	<0.5	<3	<1	--	--	--	--	--	--	11.77	0.00	17.26	
02/24/06	<50	<278	<556	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	--	--	--	11.84	0.00	17.19	
08/30/06	<80	<243	<485	<0.5	<0.5	<0.5	<3	<1	<5	<1	<1	--	--	--	--	--	--	
10/11/06	<50	<243	<485	<0.5	<0.5	<0.5	<3	<1	<1	<1	<1	--	--	--	10.70	0.00	18.33	
12/13/06	<50	<236	<472	<0.5	<0.5	<0.5	<3	<1	<5	<1	<1	--	--	--	12.14	0.00	16.89	
03/08/07	<50	<250	<500	<0.5	<0.5	<0.5	<3	<1	<5	<1	<1	--	--	--	11.68	0.00	17.35	
06/13/07									Not Accessible							--	--	--
09/12/07									Not Accessible							--	--	--
12/17/07									Not Accessible							--	--	--
03/17/08									Unable to locate							--	--	--

Table 1
Summary of Historical Groundwater Gauging and Laboratory Analytical Data

Phillips 66 Site No. 255353 (AOC 1396)
600 Westlake Avenue N.
Seattle, Washington

NOTES:

µg/L = micrograms per liter

mg/L = milligrams per liter

TOC = Relative top of casing elevation

DTW = Depth to water

SPH = Separate-phase hydrocarbon thickness

GWE = Groundwater table elevation relative to DTW data; corrected for SPH where applicable using a specific gravity of 0.80

<n = Below the detection limit

"--" = Not analyzed, sampled, or reported

NM = Not Measured

TPH as Gasoline - Analysis by Northwest Method NWTPH-Gx

TPH as Diesel and Oil - Analysis by Northwest Method NWTPH-Dx

BTEX Compounds - Analysis by EPA Method 8020A, 8021B or 8260B

Total Lead Analysis via EPA Method 6020.

Values in **BOLD** are detectable concentrations exceeding the MTCA Method A groundwater cleanup level.

^a Top of casing elevations shown prior to November 2005 based on information provided by a previous consultant. All TOC elevations were re-surveyed between November 1 and November 15, 2005 relative to N.A.V.D. 1988 using a City of Seattle benchmark by Delta Environmental Consultants. All wells were again surveyed on December 8, 2015 by Cardno WRG.

^b Well was not purged prior to sample collection.

^c TPH-Diesel and TPH-Oil did not resemble chromatogram used for quantitation.

^d Well casing was trimmed down during monument replacement in December 2004. New TOC elevation surveyed on January 27, 2005.

^e Quality control failed due to laboratory error. Quantitative analytical results not reported.

^f Contaminant does not appear to be "typical" product.

^g Chromatogram suggests that this may be overlap from the gasoline range.

^h Chromatogram suggests that this may be overlap from the motor oil range.

^h Analysis was performed outside of the method specified holding time

^j Surrogate recovery outside advisory QC limits due to matrix interference.

^k MTCA Method A Cleanup Level for TPH-Gasoline is 1,000 µg/L if benzene is not detectable in the groundwater sample. Otherwise, the action level is 800 µg/L.

^l Samples analyzed using Northwest Method NWTPH-Dx without acid/silica gel cleanup.

^m Surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present.

ⁿ Detected hydrocarbons due mainly to cleanup artifact. There is no diesel present.

^o DO meter was unavailable.

^p The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

^q Analyte had a high bias in the associated calibration verification standard.

^r Laboratory Control Sample and/or Sample Duplicate recovery was above the laboratory control limits. Analyte not detected, data not impacted.

^s Diluted due to matrix effect.

^t The total hydrocarbon result in this sample is primarily due to an individual compound eluting in the volatile hydrocarbon range.

^u Due to laboratory error, the samples were not analyzed for EPA 8260B compounds.

^v Possible field error.

^w DTW not recorded prior to sampling. Approximate value based on last quarter's initial DTW and when sampling began

^x The benzene and ethyl benzene concentrations were outside the calibration range of the instrument. A new concentration was measured during a second run, but this run was outside of the holding time for the sample. The laboratory still considers this value to be more accurate than the original estimated value listed in the lab report.

^y The Chromatogram response resembles a typical fuel pattern

^z Well casings for MW-45 and MW-54 were compromised and repaired during installation of remediation conveyance piping. Wells were re-surveyed in July 2014. 2014.

^{aa} Sample collected prior to High Intensity Targeted Extraction Event on June 23, 2015.

^{bb} Sample collected immediately after High Intensity Targeted Extraction Event on June 23, 2015.

^{cc} Sample collected prior to High Intensity Targeted Extraction Event on September 11, 2015.

^{dd} Sample collected immediately after High Intensity Targeted Extraction Event on September 11, 2015.

^{ee} Sample collected prior to High Intensity Targeted Extraction Event on September 12, 2015.

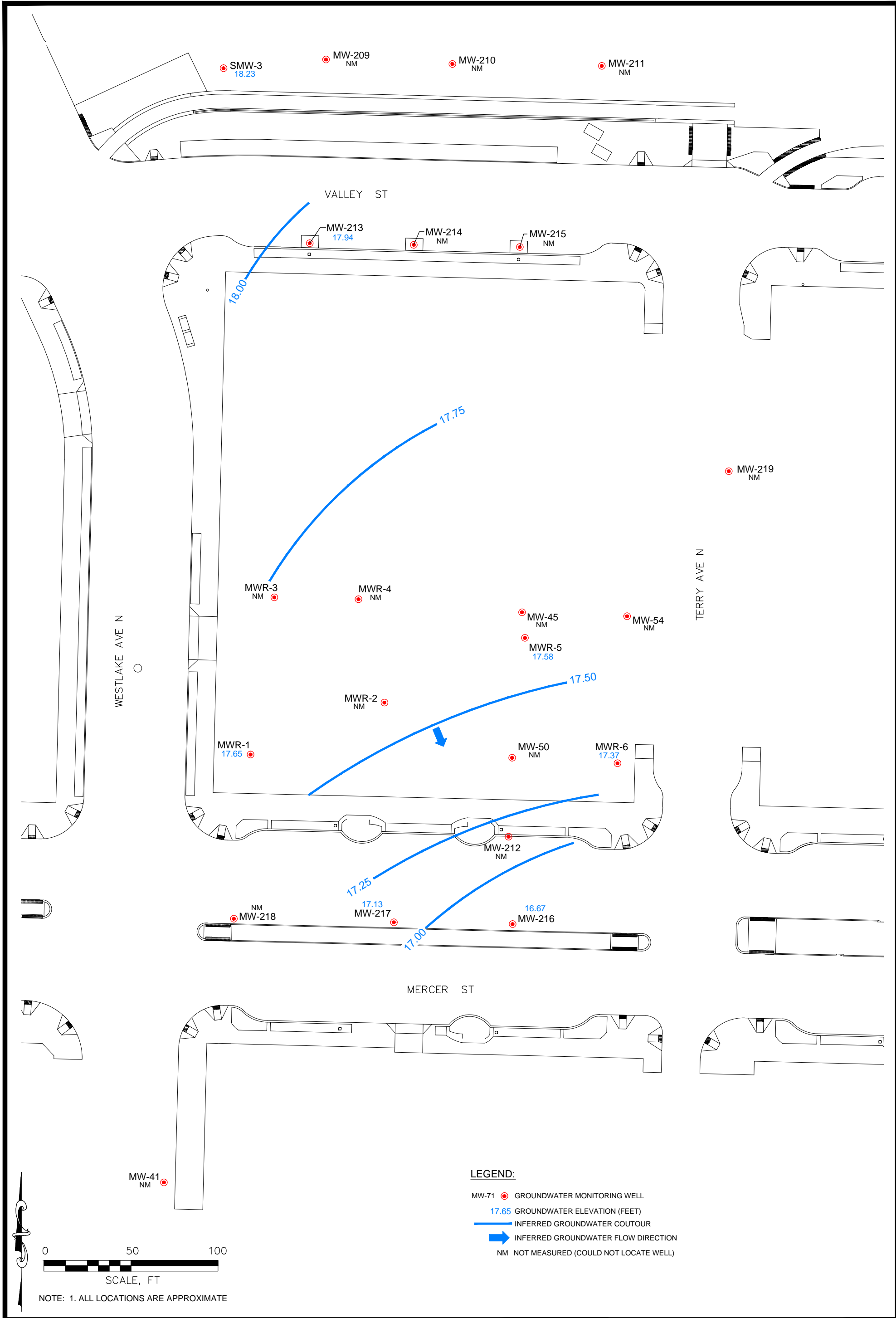
^{ff} Sample collected immediately after High Intensity Targeted Extraction Event on September 12, 2015.

^{gg} Sample collected prior to High Intensity Targeted Extraction Event on September 13, 2015.


^{hh} Sample collected immediately after High Intensity Targeted Extraction Event on September 13, 2015.

"--^{uu}" = Due to laboratory error, the samples were not analyzed for EPA 8260B compounds.

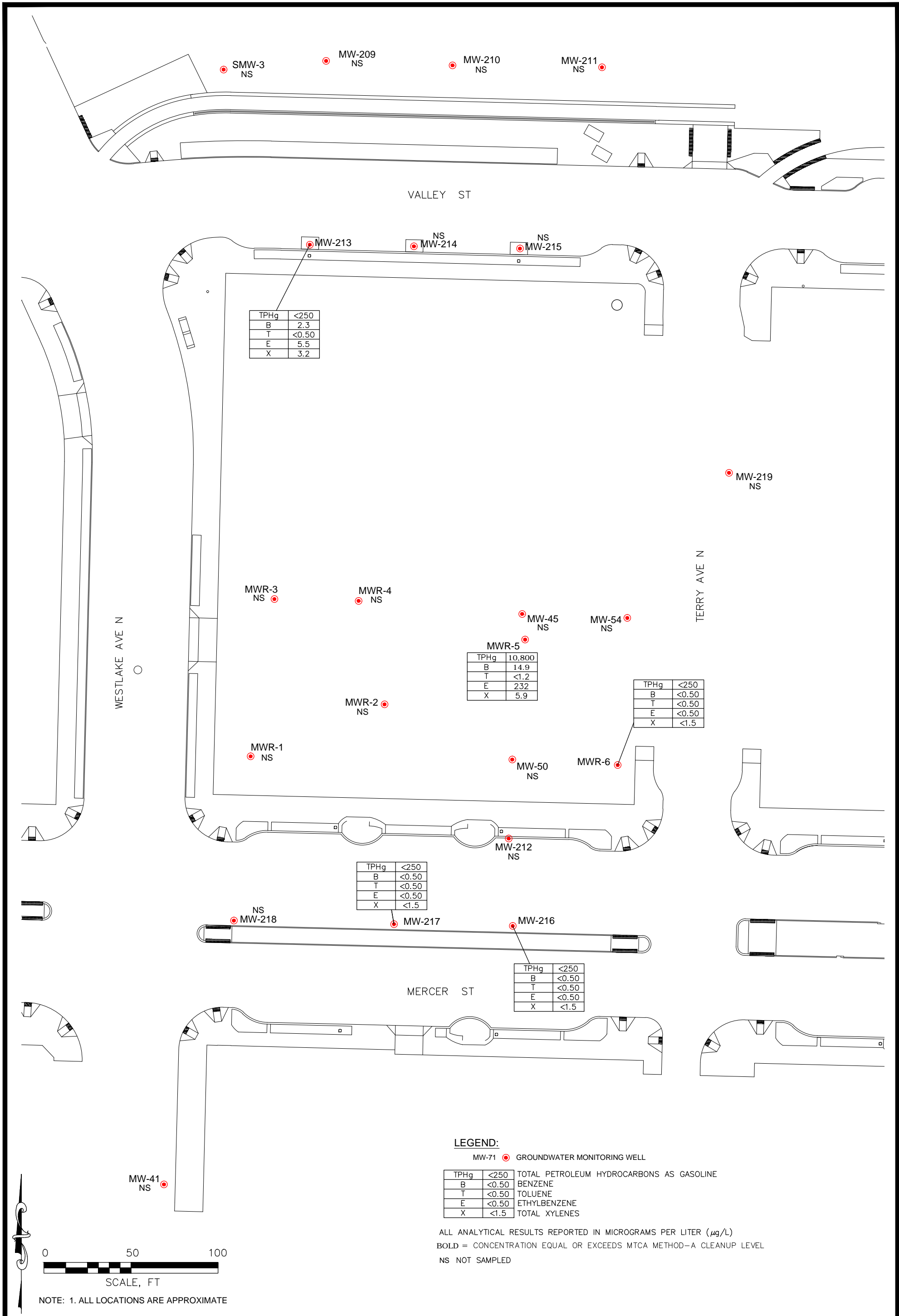
FIGURES



GROUNDWATER CONDITIONS MAP
(06/28/16)
 PHILLIPS 66 FACILITY NO. 255353 (AOC 1396)
 600 WESTLAKE AVENUE N
 SEATTLE, WA

PROJECT NUMBER: Z076000073	DATE: 9/26/16	FIGURE 1
APPROVED BY: KS	DRAWN BY: BK	
 6347 Seaview Avenue NW Seattle, Washington 98107 Ph: (206) 781-1449 *** Fax: (206) 781-1543		

S:\Projects\7675000 COP1\396 SEATTLE\4 G-5 - Standard\GW_062816.dwg

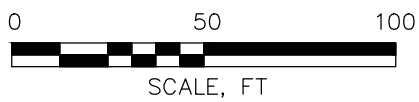


LEGEND:

MW-71 ● GROUNDWATER MONITORING WELL

TPHg	<250	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
B	<0.50	BENZENE
T	<0.50	TOLUENE
E	<0.50	ETHYLBENZENE
X	<1.5	TOTAL XYLENES

ALL ANALYTICAL RESULTS REPORTED IN MICROGRAMS PER LITER (µg/L)
 BOLD = CONCENTRATION EQUAL OR EXCEEDS MTCA METHOD-A CLEANUP LEVEL
 NS NOT SAMPLED



NOTE: 1. ALL LOCATIONS ARE APPROXIMATE

**GROUNDWATER CONDITIONS MAP
(06/28/16)**

PHILLIPS 66 FACILITY NO. 255353 (AOC 1396)
 600 WESTLAKE AVENUE N
 SEATTLE, WA

PROJECT NUMBER: Z076000073	DATE: 7/15/16	FIGURE
APPROVED BY: KS	DRAWN BY: BK	2

ATC 6347 Seaview Avenue NW
 Seattle, Washington 98107
 Ph: (206) 781-1449 *** Fax: (206) 781-1543

APPENDIX A

**LABORATORY ANALYTICAL DATA REPORT
AND CHAIN OF CUSTODY DOCUMENT**

July 08, 2016

Kyle Sattler
ATC Group Services LLC
7070 SW Fir Loop
Suite 100
Portland, OR 97223

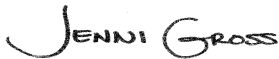
RE: Project: P66 AOC 1396 Westlake/Mercer
Pace Project No.: 1269597

Dear Kyle Sattler:

Enclosed are the analytical results for sample(s) received by the laboratory on July 01, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Jennifer Gross
jennifer.gross@pacelabs.com
Project Manager

Enclosures

cc: Cody Bishop, ATC Group Services LLC



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: P66 AOC 1396 Westlake/Mercer

Pace Project No.: 1269597

Davis Certification IDs

2795 Second Street Suite 300 Davis, CA 95618

North Dakota Certification #: R-214

Oregon Certification #: CA300002

Washington Certification #: C926-15a

California Certification #: 08263CA

Minnesota Department of Health Certification #: 006-999-465

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SAMPLE SUMMARY

Project: P66 AOC 1396 Westlake/Mercer

Pace Project No.: 1269597

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1269597001	MW-217	Water	06/28/16 09:50	07/01/16 09:35
1269597002	MW-216	Water	06/28/16 10:20	07/01/16 09:35
1269597003	MW-213	Water	06/28/16 11:35	07/01/16 09:35
1269597004	MWR-6	Water	06/28/16 13:30	07/01/16 09:35
1269597005	MWR-5	Water	06/28/16 14:45	07/01/16 09:35
1269597006	Trip Blanks	Water	06/28/16 00:00	07/01/16 09:35

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SAMPLE ANALYTE COUNT

Project: P66 AOC 1396 Westlake/Mercer
Pace Project No.: 1269597

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
1269597001	MW-217	EPA 8260B	JCP	7	PASI-DAV
		NWTPH-Gx	JCP	4	PASI-DAV
1269597002	MW-216	EPA 8260B	JCP	7	PASI-DAV
		NWTPH-Gx	JCP	4	PASI-DAV
1269597003	MW-213	EPA 8260B	JCP	7	PASI-DAV
		NWTPH-Gx	JCP	4	PASI-DAV
1269597004	MWR-6	EPA 8260B	JCP	7	PASI-DAV
		NWTPH-Gx	JCP	4	PASI-DAV
1269597005	MWR-5	EPA 8260B	JCP	7	PASI-DAV
		NWTPH-Gx	JCP	4	PASI-DAV
1269597006	Trip Blanks	EPA 8260B	JCP	7	PASI-DAV
		NWTPH-Gx	JCP	4	PASI-DAV

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: P66 AOC 1396 Westlake/Mercer
Pace Project No.: 1269597

Sample: MW-217		Lab ID: 1269597001		Collected: 06/28/16 09:50	Received: 07/01/16 09:35	Matrix: Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST Water		Analytical Method: EPA 8260B						
Benzene	ND	ug/L	0.50	1		07/07/16 04:09	71-43-2	
Toluene	ND	ug/L	0.50	1		07/07/16 04:09	108-88-3	
Ethylbenzene	ND	ug/L	0.50	1		07/07/16 04:09	100-41-4	
Xylene (Total)	ND	ug/L	1.5	1		07/07/16 04:09	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	109	%	70-130	1		07/07/16 04:09	17060-07-0	
Toluene-d8 (S)	102	%	70-130	1		07/07/16 04:09	2037-26-5	
4-Bromofluorobenzene (S)	103	%	70-130	1		07/07/16 04:09	460-00-4	
NWTPH-Gx MSV Water		Analytical Method: NWTPH-Gx						
TPH as Gas	ND	ug/L	250	1		07/07/16 13:55		
Surrogates								
1,2-Dichloroethane-d4 (S)	109	%	50-150	1		07/07/16 13:55	17060-07-0	
Toluene-d8 (S)	101	%	50-150	1		07/07/16 13:55	2037-26-5	
4-Bromofluorobenzene (S)	102	%	50-150	1		07/07/16 13:55	460-00-4	

Sample: MW-216		Lab ID: 1269597002		Collected: 06/28/16 10:20	Received: 07/01/16 09:35	Matrix: Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST Water		Analytical Method: EPA 8260B						
Benzene	ND	ug/L	0.50	1		07/07/16 04:29	71-43-2	
Toluene	ND	ug/L	0.50	1		07/07/16 04:29	108-88-3	
Ethylbenzene	ND	ug/L	0.50	1		07/07/16 04:29	100-41-4	
Xylene (Total)	ND	ug/L	1.5	1		07/07/16 04:29	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	108	%	70-130	1		07/07/16 04:29	17060-07-0	
Toluene-d8 (S)	102	%	70-130	1		07/07/16 04:29	2037-26-5	
4-Bromofluorobenzene (S)	101	%	70-130	1		07/07/16 04:29	460-00-4	
NWTPH-Gx MSV Water		Analytical Method: NWTPH-Gx						
TPH as Gas	ND	ug/L	250	1		07/07/16 14:15		
Surrogates								
1,2-Dichloroethane-d4 (S)	109	%	50-150	1		07/07/16 14:15	17060-07-0	
Toluene-d8 (S)	102	%	50-150	1		07/07/16 14:15	2037-26-5	
4-Bromofluorobenzene (S)	98	%	50-150	1		07/07/16 14:15	460-00-4	

Sample: MW-213		Lab ID: 1269597003		Collected: 06/28/16 11:35	Received: 07/01/16 09:35	Matrix: Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST Water		Analytical Method: EPA 8260B						
Benzene	2.3	ug/L	0.50	1		07/07/16 04:49	71-43-2	
Toluene	ND	ug/L	0.50	1		07/07/16 04:49	108-88-3	
Ethylbenzene	5.5	ug/L	0.50	1		07/07/16 04:49	100-41-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: P66 AOC 1396 Westlake/Mercer

Pace Project No.: 1269597

Sample: MW-213		Lab ID: 1269597003		Collected: 06/28/16 11:35		Received: 07/01/16 09:35		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
8260 MSV UST Water		Analytical Method: EPA 8260B							
Xylene (Total)	3.2	ug/L	1.5	1		07/07/16 04:49	1330-20-7		
Surrogates									
1,2-Dichloroethane-d4 (S)	107	%	70-130	1		07/07/16 04:49	17060-07-0		
Toluene-d8 (S)	101	%	70-130	1		07/07/16 04:49	2037-26-5		
4-Bromofluorobenzene (S)	103	%	70-130	1		07/07/16 04:49	460-00-4		
NWTPH-Gx MSV Water		Analytical Method: NWTPH-Gx							
TPH as Gas	ND	ug/L	250	1		07/07/16 11:55			
Surrogates									
1,2-Dichloroethane-d4 (S)	108	%	50-150	1		07/07/16 11:55	17060-07-0		
Toluene-d8 (S)	101	%	50-150	1		07/07/16 11:55	2037-26-5		
4-Bromofluorobenzene (S)	103	%	50-150	1		07/07/16 11:55	460-00-4		

Sample: MWR-6		Lab ID: 1269597004		Collected: 06/28/16 13:30		Received: 07/01/16 09:35		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
8260 MSV UST Water		Analytical Method: EPA 8260B							
Benzene	ND	ug/L	0.50	1		07/07/16 05:09	71-43-2		
Toluene	ND	ug/L	0.50	1		07/07/16 05:09	108-88-3		
Ethylbenzene	ND	ug/L	0.50	1		07/07/16 05:09	100-41-4		
Xylene (Total)	ND	ug/L	1.5	1		07/07/16 05:09	1330-20-7		
Surrogates									
1,2-Dichloroethane-d4 (S)	107	%	70-130	1		07/07/16 05:09	17060-07-0		
Toluene-d8 (S)	101	%	70-130	1		07/07/16 05:09	2037-26-5		
4-Bromofluorobenzene (S)	101	%	70-130	1		07/07/16 05:09	460-00-4		
NWTPH-Gx MSV Water		Analytical Method: NWTPH-Gx							
TPH as Gas	ND	ug/L	250	1		07/07/16 14:35			
Surrogates									
1,2-Dichloroethane-d4 (S)	109	%	50-150	1		07/07/16 14:35	17060-07-0		
Toluene-d8 (S)	102	%	50-150	1		07/07/16 14:35	2037-26-5		
4-Bromofluorobenzene (S)	100	%	50-150	1		07/07/16 14:35	460-00-4		

Sample: MWR-5		Lab ID: 1269597005		Collected: 06/28/16 14:45		Received: 07/01/16 09:35		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
8260 MSV UST Water		Analytical Method: EPA 8260B							
Benzene	14.9	ug/L	1.2	2.5		07/08/16 02:17	71-43-2		
Toluene	ND	ug/L	1.2	2.5		07/08/16 02:17	108-88-3		
Ethylbenzene	232	ug/L	1.2	2.5		07/08/16 02:17	100-41-4		
Xylene (Total)	519	ug/L	3.8	2.5		07/08/16 02:17	1330-20-7		
Surrogates									
1,2-Dichloroethane-d4 (S)	109	%	70-130	2.5		07/08/16 02:17	17060-07-0		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: P66 AOC 1396 Westlake/Mercer

Pace Project No.: 1269597

Sample: MWR-5		Lab ID: 1269597005		Collected: 06/28/16 14:45		Received: 07/01/16 09:35		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
8260 MSV UST Water		Analytical Method: EPA 8260B							
Surrogates									
Toluene-d8 (S)	99	%.	70-130	2.5		07/08/16 02:17	2037-26-5		
4-Bromofluorobenzene (S)	97	%.	70-130	2.5		07/08/16 02:17	460-00-4		
NWTPH-Gx MSV Water		Analytical Method: NWTPH-Gx							
TPH as Gas	10800	ug/L	1250	5		07/07/16 14:55			
Surrogates									
1,2-Dichloroethane-d4 (S)	109	%.	50-150	5		07/07/16 14:55	17060-07-0		
Toluene-d8 (S)	101	%.	50-150	5		07/07/16 14:55	2037-26-5		
4-Bromofluorobenzene (S)	101	%.	50-150	5		07/07/16 14:55	460-00-4		

Sample: Trip Blanks		Lab ID: 1269597006		Collected: 06/28/16 00:00		Received: 07/01/16 09:35		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
8260 MSV UST Water		Analytical Method: EPA 8260B							
Benzene	ND	ug/L	0.50	1		07/07/16 01:29	71-43-2		
Toluene	ND	ug/L	0.50	1		07/07/16 01:29	108-88-3		
Ethylbenzene	ND	ug/L	0.50	1		07/07/16 01:29	100-41-4		
Xylene (Total)	ND	ug/L	1.5	1		07/07/16 01:29	1330-20-7		
Surrogates									
1,2-Dichloroethane-d4 (S)	101	%.	70-130	1		07/07/16 01:29	17060-07-0		
Toluene-d8 (S)	101	%.	70-130	1		07/07/16 01:29	2037-26-5		
4-Bromofluorobenzene (S)	99	%.	70-130	1		07/07/16 01:29	460-00-4		
NWTPH-Gx MSV Water		Analytical Method: NWTPH-Gx							
TPH as Gas	ND	ug/L	250	1		07/07/16 13:35			
Surrogates									
1,2-Dichloroethane-d4 (S)	107	%.	50-150	1		07/07/16 13:35	17060-07-0		
Toluene-d8 (S)	102	%.	50-150	1		07/07/16 13:35	2037-26-5		
4-Bromofluorobenzene (S)	100	%.	50-150	1		07/07/16 13:35	460-00-4		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: P66 AOC 1396 Westlake/Mercer
Pace Project No.: 1269597

QC Batch: DAVM/4098 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260 MSV UST Water
Associated Lab Samples: 1269597001, 1269597002, 1269597003, 1269597004, 1269597005, 1269597006

METHOD BLANK: 340492 Matrix: Water
Associated Lab Samples: 1269597001, 1269597002, 1269597003, 1269597004, 1269597005, 1269597006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	0.50	07/06/16 22:29	
Ethylbenzene	ug/L	ND	0.50	07/06/16 22:29	
Toluene	ug/L	ND	0.50	07/06/16 22:29	
Xylene (Total)	ug/L	ND	1.5	07/06/16 22:29	
1,2-Dichloroethane-d4 (S)	%	98	70-130	07/06/16 22:29	
4-Bromofluorobenzene (S)	%	97	70-130	07/06/16 22:29	
Toluene-d8 (S)	%	101	70-130	07/06/16 22:29	

LABORATORY CONTROL SAMPLE: 340493

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	40	37.6	94	75-125	
Ethylbenzene	ug/L	40	39.7	99	75-125	
Toluene	ug/L	40	39.4	98	75-125	
Xylene (Total)	ug/L	120	117	98	75-125	
1,2-Dichloroethane-d4 (S)	%			101	70-130	
4-Bromofluorobenzene (S)	%			103	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 340494 340495

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		1269597004 Result	Spike Conc.	Spike Conc.	MS Result						
Benzene	ug/L	ND	40	40	38.4	37.7	96	94	75-125	2	30
Ethylbenzene	ug/L	ND	40	40	40.3	39.6	101	99	74-125	2	30
Toluene	ug/L	ND	40	40	39.5	39.4	99	98	75-125	0	30
Xylene (Total)	ug/L	ND	120	120	118	118	99	98	61-129	0	30
1,2-Dichloroethane-d4 (S)	%						98	97	70-130		
4-Bromofluorobenzene (S)	%						104	102	70-130		
Toluene-d8 (S)	%						101	101	70-130		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: P66 AOC 1396 Westlake/Mercer
Pace Project No.: 1269597

QC Batch: DAVM/4102 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260 MSV UST Water
Associated Lab Samples: 1269597005

METHOD BLANK: 340999 Matrix: Water
Associated Lab Samples: 1269597005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	0.50	07/07/16 18:17	
Ethylbenzene	ug/L	ND	0.50	07/07/16 18:17	
Toluene	ug/L	ND	0.50	07/07/16 18:17	
Xylene (Total)	ug/L	ND	1.5	07/07/16 18:17	
1,2-Dichloroethane-d4 (S)	%	107	70-130	07/07/16 18:17	
4-Bromofluorobenzene (S)	%	97	70-130	07/07/16 18:17	
Toluene-d8 (S)	%	99	70-130	07/07/16 18:17	

LABORATORY CONTROL SAMPLE: 341000

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	40	36.1	90	75-125	
Ethylbenzene	ug/L	40	38.5	96	75-125	
Toluene	ug/L	40	37.4	94	75-125	
Xylene (Total)	ug/L	120	114	95	75-125	
1,2-Dichloroethane-d4 (S)	%			106	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Toluene-d8 (S)	%			99	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 341013 341014

Parameter	Units	1269601002 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	MSD Result	MSD Result						
Benzene	ug/L	ND	40	40	35.8	35.5	89	89	75-125	1	30	
Ethylbenzene	ug/L	ND	40	40	37.5	37.6	94	94	74-125	0	30	
Toluene	ug/L	ND	40	40	36.9	36.9	92	92	75-125	0	30	
Xylene (Total)	ug/L	ND	120	120	111	111	92	92	61-129	0	30	
1,2-Dichloroethane-d4 (S)	%						109	110	70-130			
4-Bromofluorobenzene (S)	%						99	99	70-130			
Toluene-d8 (S)	%						99	100	70-130			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: P66 AOC 1396 Westlake/Mercer
Pace Project No.: 1269597

QC Batch: DAVM/4099 Analysis Method: NWTPH-Gx
QC Batch Method: NWTPH-Gx Analysis Description: NWTPH-Gx MSV Water
Associated Lab Samples: 1269597001, 1269597002, 1269597003, 1269597004, 1269597005, 1269597006

METHOD BLANK: 340496 Matrix: Water
Associated Lab Samples: 1269597001, 1269597002, 1269597003, 1269597004, 1269597005, 1269597006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	ug/L	ND	250	07/07/16 11:34	
1,2-Dichloroethane-d4 (S)	%.	106	50-150	07/07/16 11:34	
4-Bromofluorobenzene (S)	%.	101	50-150	07/07/16 11:34	
Toluene-d8 (S)	%.	101	50-150	07/07/16 11:34	

LABORATORY CONTROL SAMPLE: 340497

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH as Gas	ug/L	480	421	88	70-130	
1,2-Dichloroethane-d4 (S)	%.			106	50-150	
4-Bromofluorobenzene (S)	%.			102	50-150	
Toluene-d8 (S)	%.			101	50-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 340498 340499

Parameter	Units	1269597003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
TPH as Gas	ug/L	ND	480	480	466	478	82	85	70-130	3	25	
1,2-Dichloroethane-d4 (S)	%.						109	108	50-150			
4-Bromofluorobenzene (S)	%.						102	101	50-150			
Toluene-d8 (S)	%.						101	101	50-150			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: P66 AOC 1396 Westlake/Mercer
Pace Project No.: 1269597

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-DAV Pace Analytical Services - Davis

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: P66 AOC 1396 Westlake/Mercer

Pace Project No.: 1269597

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1269597001	MW-217	EPA 8260B	DAVM/4098		
1269597002	MW-216	EPA 8260B	DAVM/4098		
1269597003	MW-213	EPA 8260B	DAVM/4098		
1269597004	MWR-6	EPA 8260B	DAVM/4098		
1269597005	MWR-5	EPA 8260B	DAVM/4098		
1269597005	MWR-5	EPA 8260B	DAVM/4102		
1269597006	Trip Blanks	EPA 8260B	DAVM/4098		
1269597001	MW-217	NWTPH-Gx	DAVM/4099		
1269597002	MW-216	NWTPH-Gx	DAVM/4099		
1269597003	MW-213	NWTPH-Gx	DAVM/4099		
1269597004	MWR-6	NWTPH-Gx	DAVM/4099		
1269597005	MWR-5	NWTPH-Gx	DAVM/4099		
1269597006	Trip Blanks	NWTPH-Gx	DAVM/4099		

REPORT OF LABORATORY ANALYSIS

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Sample Condition Upon Receipt

Client Name: P66 ATC Project #: _____

WO# : 1269597



1269597

Courier: Fed Ex UPS USPS Client
 Commercial Pace OnTrac Other: N/A
 Tracking Number: 6662 9805 8938

Custody Seal on Cooler/Box Present? Yes No Seals Intact? Yes No
 Packing Material: Bubble Wrap Bubble Bags None Other: N/A Temp Blank? Yes No
 Thermom. Used: DA1434 DA2285 Type of Ice: Wet Blue Dry Ice None Samples on ice, cooling process has begun
 Cooler Temp Read(°C): 1.6 Cooler Temp Corrected(°C): 2.0 Biological Tissue Frozen? Yes No N/A
 Temp should be above freezing to 6°C Correction Factor: +0.9 Date and Initials of Person Examining Contents: CR 070116

			Comments:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	<u>Samples (002-006) do</u>
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	<u>not have sample times/dates</u>
Chain of Custody Relinquished?	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	<u>noted on the COC. S.R.</u>
Sampler Name and/or Signature on COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.	<u>will use times on Sample</u>
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	<u>Labels.</u>
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.	<u>002 → 1020 062816</u>
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.	<u>003 → 1135</u>
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	<u>004 → 1330</u>
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<u>005 → 1445</u>
Containers Intact?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.	<u>006 → 0000</u>
Filtered Volume Received for Dissolved Tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	Note if sediment is visible in the dissolved container.
Sample Labels Match COC?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12.	
-Includes Date/Time/ID/Analysis Matrix: <u>WT</u>			
All containers needing acid/base preservation have been checked?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	13.	<input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH >9 Sulfide, NaOH >12 Cyanide)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Sample #	
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed:	Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.	
Trip Blank Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		
Pace Trip Blank Lot # (if purchased):			

CLIENT NOTIFICATION/RESOLUTION

Field Data Required? Yes No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: JENNI GROSS

Date: 07/05/16

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

APPENDIX B

FIELD REPORT/GROUNDWATER GAUGING & SAMPLING LOGS



Field Report

FLD-100

Revision 1.0

6/1/2016

ATC Branch: Seattle, WA		Date: 6/28/16	Page of
ATC Representative(s): Cody Bishop		Project: AOC #1396	
Role: Sampler		Location: 600 Westlake Ave N, Seattle, WA	
Contact Information: 206-781-1449		Project No: Z076000073	Task No:
Scope of Work: GWM		Weather: Overcast	Temperature: 60's
<input checked="" type="checkbox"/> Monitoring <input type="checkbox"/> Assessment <input type="checkbox"/> Remediation <input type="checkbox"/> Closure		Contractor: Altus + SPD	

Time:	Comments:
0800	Depart office for site. Stopped by hardware store for locks. Store did not have the correct type of lock
0825	Arrive on site. Meet Seattle police officers who are helping w/ today's task
0840	Altus traffic control arrives on site.
0845	ATC begins safety meeting w/ Altus and SPD. Discussed today's task and any dangers of the job. Performed site walk to get an idea of what to expect
0855	Altus mobs to begin set up of blocking off Mercer Ave.
0920	ATC mobs to MW-217. Begin set-up over MW-217.
0955	MW-217 complete
1000	Mob to MW-216
1035	MW-216 complete. Packed up equipment. Mobs to meeting site inside of the compound to dismiss Altus + SPD
1055	Altus + SPD depart site
1100	Mob to MW-213 - set up equipment

Equipment Used:

Contractor Hours (per Person):	Staff / Technician Hours:	Mileage:
Copies To:	Project Manager:	
	Reviewed By:	



Field Report

FLD-100

Revision 1.0

6/1/2016

ATC Branch: Seattle, WA		Date: 6/28/16	Page of
ATC Representative(s): Cody Bishop		Project: AOC #1396	
Role: Sampler		Location: 600 Westlake Ave N, Seattle, WA	
Contact Information: 206-781-1449		Project No: Z076000073	Task No:
Scope of Work: GWM		Weather:	Temperature:
<input checked="" type="checkbox"/> Monitoring <input type="checkbox"/> Assessment <input type="checkbox"/> Remediation <input type="checkbox"/> Closure		Contractor:	

Time:	Comments:
1100	Begin sampling MW-213
1145	MW-213 completed. pack up equipment. Mob back to compound
1200	Leave
1245	mob to MW-6. set up equipment
1300	Begin MW-6
1340	- MW-6 complete
1400	- Mob to MW-5 - Begin sampling
1500	- completed MW-5 - Needs 2 bolts for lid
1510	- pack up equipment. Begin boring of MW-1, SMW-3 & MW-211
	MW-211 unable to access due to bent bolt.
	Need crow bar
1600	Depart Site for office
1700	Arrive at office & unload equipment
	* Could not access MW-45
	* Purge water was placed into a holding tank in the remediation system

Equipment Used:

Contractor Hours (per Person):	Staff / Technician Hours: 8 hrs	Mileage:
Copies To:	Project Manager: Kyle Scatter	Reviewed By:



Monitoring Well Purging and Sampling Log

FLD-103

Revision 1.0

Jul-08

ATC Branch: Seattle, WA	Date: 6/28/16	Page of
ATC Representative(s): Cody Bishop	Project: AOC #1396	
	Location: 600 Westlake Ave N, Seattle, WA	
Contact Information: 206-781-1449	Project No: Z076000073	Task No: 7601
Well ID: MW-217	Weather: Overcast	Temperature: 60's

Purging & Sampling Instrumentation & Method

Water Level Meter (Model/ID): Envirotape	Interface Probe (Model/ID): NA
Water Quality Meter (Model/ID): YSI 556 MPS	Decontamination Method: Alconox/DI Water
Purging Method: <input type="checkbox"/> PVC Bailer <input type="checkbox"/> Vacuum Truck <input type="checkbox"/> Submersible Pump <input checked="" type="checkbox"/> Peristaltic Pump Other: <input type="checkbox"/>	
3 Well Volumes <input checked="" type="checkbox"/> Low Flow <input type="checkbox"/> Micro Purge <input type="checkbox"/> Intake Depth (feet below TOC) <input type="checkbox"/>	
Sampling Method: <input type="checkbox"/> Teflon Bailer <input type="checkbox"/> Disposable Bailer <input checked="" type="checkbox"/> Dedicated Tubing Other: <input type="checkbox"/>	

Casing Volume Information

Purging Calculations

Casing Diameter (Circle): 2" 4" 6" Other	Casing Volumes (CV):
Casing Multiplier (CM)(gallons/foot): 0.16 0.65 1.47	WC <input type="checkbox"/> x CM <input type="checkbox"/> = <input type="checkbox"/> (CV)(gal) x 3.0 CV (gal) = <input type="checkbox"/> PV

Monitoring Measurements

Depth to LNAPL (feet):	Total Well Depth (feet): 24.60
Depth to Water (DTW)(feet): 12.95	Water Column (WC)(feet): 11.65
LNAPL Thickness (ft):	Purging Start Time: 0930

Purging Data

Time (24 Hours)	DTW (Feet)	Cum. Vol. Purged (Gallons)	Temp (°C) (± 1°)	Specific Cond. (uS/cm) (± 5%)	Turbidity NTU	Dissolved Oxygen (mg/L) (± 10%)	pH (± 0.1)	ORP (mV) (± 10 mV)	Other
0940	12.89	0.15	16.93	1814	clear	0.64	7.52	-61.1	
0943	12.90	0.18	16.95	1812	clear	0.54	7.51	-60.5	
0946	12.89	0.21	16.98	1809	clear	0.47	7.52	-59.8	
0949	12.89	0.24	16.99	1806	clear	0.48	7.54	-62.1	

Sample Data

Sample ID: MW-217	Time of Sample: 0950	Filtered (yes/no)	Preservatives	Analytical Parameters
Container Types, Volumes, & Quantities:				
6-40ml VOAs	4 - 40ml VOAs	NO	HCl	Gx, VOCs
2-250ml PE		NO/Lab Filtered	HNO3	Pb, Dissolved Pb

Well Recovery Data

Maximum Drawdown (DTWm)(feet):	Approximate Flow Rate (GPM):
Recovery Type: <input type="checkbox"/> Fast <input type="checkbox"/> Slow	% Recovery =

Purge Water Disposition (Attach Drum Inventory Log - FLD 108):

Comments:



Monitoring Well Purging and Sampling Log

FLD-103

Revision 1.0

Jul-08

ATC Branch: Seattle, WA

Date: 6/28/16

Page of

ATC Representative(s): Cody Bishop

Project: AOC #1396

Location: 600 Westlake Ave N, Seattle, WA

Contact Information: 206-781-1449

Project No: Z076000073

Task No: 7601

Well ID:

MW-216

Weather: Overcast

Temperature: 60's

Purging & Sampling Instrumentation & Method

Water Level Meter (Model/ID): Envirotape

Interface Probe (Model/ID): NA

Water Quality Meter (Model/ID): YSI 556 MPS

Decontamination Method: Alconox/DI Water

Purging Method: PVC Bailer Vacuum Truck Submersible Pump Peristaltic Pump Other: _____3 Well Volumes Low Flow Micro Purge Intake Depth (feet below TOC) _____Sampling Method: Teflon Bailer Disposable Bailer Dedicated Tubing Other: _____

Casing Volume Information

Purging Calculations

Casing Diameter (Circle): 2" 4" 6" Other

Casing Volumes (CV):

Casing Multiplier (CM)_(gallons/foot) 0.16 0.65 1.47WC _____ x CM _____ = _____ (CV)_(gal) x 3.0 CV_(gal) = _____ PV

Monitoring Measurements

Depth to LNAPL (feet): _____

Total Well Depth (feet): 19.20

Depth to Water (DTW)(feet): 13.01

Water Column (WC)(feet): 6.19

LNAPL Thickness (ft): _____

Purging Start Time: 1000

Purging Data

Time (24 Hours)	DTW (Feet)	Cum. Vol. Purged (Gallons)	Temp (°C) (± 1°)	Specific Cond. (uS/cm) (± 5%)	Turbidity NTU	Dissolved Oxygen (mg/L) (± 10%)	pH (± 0.1)	ORP (mV) (± 10 mV)	Other
1010	13.37	0.15	17.29	1377	clear	6.68	7.58	-41.4	
1013	13.38	0.18	17.17	1377	"	6.60	7.58	-42.5	
1016	13.39	0.21	17.32	1375	"	6.54	7.57	-43.6	

Sample Data

Sample ID:	Time of Sample:	Filtered (yes/no)	Preservatives	Analytical Parameters
Container Types, Volumes, & Quantities:				
6-40ml VOAs		NO	HCl	Gx, VOCs
2-250ml PE		NO/Lab Filtered	HNO3	Pb, Dissolved Pb

Well Recovery Data

Maximum Drawdown (DTW _m)(feet):	Approximate Flow Rate (GPM):
Recovery Type: <input type="checkbox"/> Fast <input type="checkbox"/> Slow	% Recovery =

Purge Water Disposition (Attach Drum Inventory Log - FLD 108):

Comments:



Monitoring Well Purging and Sampling Log

FLD-103

Revision 1.0

Jul-08

ATC Branch: Seattle, WA

Date: 6/28/14

Page of

ATC Representative(s): Cody Bishop

Project: AOC #1396

Location: 600 Westlake Ave N, Seattle, WA

Contact Information: 206-781-1449

Project No: Z076000073

Task No: 7601

Well ID:

mw-213

Weather:

Temperature:

Purging & Sampling Instrumentation & Method

Water Level Meter (Model/ID): Envirotape

Interface Probe (Model/ID): NA

Water Quality Meter (Model/ID): YSI 556 MPS

Decontamination Method: Alconox/DI Water

Purging Method: PVC Bailer Vacuum Truck Submersible Pump Peristaltic Pump Other: 3 Well Volumes Low Flow Micro Purge Intake Depth (feet below TOC) Sampling Method: Teflon Bailer Disposable Bailer Dedicated Tubing Other:

Casing Volume Information

Purging Calculations

Casing Diameter (Circle): 2" 4" 6" Other

Casing Volumes (CV):

Casing Multiplier (CM)_(gallons/foot): 0.16 0.65 1.47WC x CM = (CV)_(gal) x 3.0 CV_(gal) = PV

Monitoring Measurements

Depth to LNAPL (feet):

Total Well Depth (feet): 20.20

Depth to Water (DTW)(feet): 9.41

Water Column (WC)(feet): 10.79

LNAPL Thickness (ft):

Purging Start Time: 1110

Purging Data

Time (24 Hours)	DTW (Feet)	Cum. Vol. Purged (Gallons)	Temp (°C) (± 1°)	Specific Cond. (uS/cm) (± 5%)	Turbidity NTU	Dissolved Oxygen (mg/L) (± 10%)	pH (± 0.1)	ORP (mV) (± 10 mV)	Other
1120	9.71	0.15	17.06	539	Clear	2.73	7.79	-29.7	
1123	9.74	0.18	16.99	536	"	2.72	7.80	-28.1	
1128	9.77	0.24	17.07	529	"	2.74	7.80	-26.5	
1129	9.80	0.29	17.07	525	"	2.79	7.81	-25.9	

Sample Data

Sample ID: mw213	Time of Sample: 1135	Filtered (yes/no)	Preservatives	Analytical Parameters
Container Types, Volumes, & Quantities:				
6-40ml VOAs	4 VOAs	NO	HCl	Gx, VOCs
2-250ml PE		NO/Lab Filtered	HNO3	Pb, Dissolved Pb

Well Recovery Data

Maximum Drawdown (DTW_m)(feet):

Approximate Flow Rate (GPM):

Recovery Type: Fast Slow

% Recovery =

Purge Water Disposition (Attach Drum Inventory Log - FLD 108):

Comments:



Monitoring Well Purging and Sampling Log

FLD-103

Revision 1.0

Jul-08

ATC Branch: Seattle, WA

Date: 6/28/16

Page of

ATC Representative(s): Cody Bishop

Project: AOC #1396

Location: 600 Westlake Ave N, Seattle, WA

Contact Information: 206-781-1449

Project No: Z076000073

Task No: 7601

Well ID:

mmr-6

Weather:

Temperature:

Purging & Sampling Instrumentation & Method

Water Level Meter (Model/ID): Envirotape

Interface Probe (Model/ID): NA

Water Quality Meter (Model/ID): YSI 556 MPS

Decontamination Method: Alconox/DI Water

Purging Method: PVC Bailer Vacuum Truck Submersible Pump Peristaltic Pump Other: _____3 Well Volumes Low Flow Micro Purge Intake Depth (feet below TOC) _____Sampling Method: Teflon Bailer Disposable Bailer Dedicated Tubing Other: _____

Casing Volume Information

Purging Calculations

Casing Diameter (Circle): 2" 4" 6" Other

Casing Volumes (CV):

Casing Multiplier (CM)_(gallons/foot): 0.16 0.65 1.47WC _____ x CM _____ = _____ (CV)_(gal) x 3.0 CV_(gal) = _____ PV

Monitoring Measurements

Depth to LNAPL (feet): _____

Total Well Depth (feet): 16.50Depth to Water (DTW)(feet): 11.75Water Column (WC)(feet): 4.75

LNAPL Thickness (ft): _____

Purging Start Time: 1310

Purging Data

Time (24 Hours)	DTW (Feet)	Cum. Vol. Purged (Gallons)	Temp (°C) (± 1°)	Specific Cond. (uS/cm) (± 5%)	Turbidity NTU	Dissolved Oxygen (mg/L) (± 10%)	pH (± 0.1)	ORP (mV) (± 10 mV)	Other
1320	11.85	0.20	17.74	1196	Clear	1.18	7.91	-105.7	
1323	11.86	0.28	17.73	1145	"	0.88	7.32	-105.7	
1326	11.91	0.28	17.79	1109	"	0.68	7.18	-107.7	
1329	11.93	0.29	17.79	1098	"	0.59	7.12	-110.8	

Sample Data

Sample ID: <u>mmr-6</u>	Time of Sample: <u>1330</u>	Filtered (yes/no)	Preservatives	Analytical Parameters
Container Types, Volumes, & Quantities:				
6-40ml VOAs		NO	HCl	Gx, VOCs
2-250ml PE		NO/Lab Filtered	HNO3	Pb, Dissolved Pb

Well Recovery Data

Maximum Drawdown (DTW_m)(feet): _____ Approximate Flow Rate (GPM): _____

Recovery Type: _____ Fast _____ Slow % Recovery = _____

Purge Water Disposition (Attach Drum Inventory Log - FLD 108): _____

Comments:



Monitoring Well Purging and Sampling Log

FLD-103

Revision 1.0

Jul-08

ATC Branch: Seattle, WA

Date: 6/28/16

Page of

ATC Representative(s): Cody Bishop

Project: AOC #1396

Location: 600 Westlake Ave N, Seattle, WA

Contact Information: 206-781-1449

Project No: Z076000073

Task No: 7601

Well ID: MURK5

Weather:

Temperature:

Purging & Sampling Instrumentation & Method

Water Level Meter (Model/ID): Envirotape

Interface Probe (Model/ID): NA

Water Quality Meter (Model/ID): YSI 556 MPS

Decontamination Method: Alconox/DI Water

Purging Method: PVC Bailer Vacuum Truck Submersible Pump Peristaltic Pump Other: 3 Well Volumes Low Flow Micro Purge Intake Depth (feet below TOC) Sampling Method: Teflon Bailer Disposable Bailer Dedicated Tubing Other:

Casing Volume Information

Purging Calculations

Casing Diameter (Circle): 2" 4" 6" Other

Casing Volumes (CV):

Casing Multiplier (CM)(gallons/foot): 0.16 0.65 1.47

WC x CM = (CV)(gal) x 3.0 CV (gal) = PV

Monitoring Measurements

Depth to LNAPL (feet):

Total Well Depth (feet): 16.25

Depth to Water (DTW)(feet): 9.54

Water Column (WC)(feet): 6.71

LNAPL Thickness (ft):

Purging Start Time: 1420

Purging Data

Time (24 Hours)	DTW (Feet)	Cum. Vol. Purged (Gallons)	Temp (°C) (± 1°)	Specific Cond. (uS/cm) (± 5%)	Turbidity NTU	Dissolved Oxygen (mg/L) (± 10%)	pH (± 0.1)	ORP (mV) (± 10 mV)	Other
1430	9.61	0.20	16.17	420	Clear	1.28	6.85	-46.8	
1433	9.63	0.23	16.21	409	11	0.70	6.86	-49.8	
1437	9.71	0.26	16.27	400	11	0.49	6.87	-56.2	
1439	9.75	0.29	16.34	394	11	0.41	6.86	-56.6	

Sample Data

Sample ID: MURK5	Time of Sample: 1445	Filtered (yes/no)	Preservatives	Analytical Parameters
Container Types, Volumes, & Quantities:				
6-40ml VOAs		NO	HCl	Gx, VOCs
2-250ml PE		NO/Lab Filtered	HNO3	Pb, Dissolved Pb

Well Recovery Data

Maximum Drawdown (DTW_m)(feet):

Approximate Flow Rate (GPM):

Recovery Type: Fast Slow

% Recovery =

Purge Water Disposition (Attach Drum Inventory Log - FLD 108):

Comments:



Monitor Well Gauging Log

FLD-102

Revision 0.0

Jul-08

ATC Branch: Seattle, WA

Date: 6/28/14

Page of

ATC Representative(s): Cody Bishop

Project: AOC #1396

Location: 600 Westlake Ave N, Seattle, WA

Contact Information:

206-781-1449

Project No: Z076000073

Task No:

Weather: Overcast

Temperature: 60's

Water Level Meter Model/ID: EnviroTape

Interface Probe Model/ID:

Well ID	Casing Diameter (inches) / Type	Time of Well Cap Removal*	Time of Gauging*	Depth To LNAPL (feet)	Depth To Water (feet)	LNAPL Thickness (feet)	Total Well Depth (feet)	Other (DTW, DO, ORP, Temp, etc)
MW-212	2"	0925	0930	-	12.95	-	24.60	
MW-212	2"	0955	1000	-	13.01	-	19.20	
MW-213	2"	1105	1110	-	9.91	-	20.20	
MW-45				-	1	-		Could not Access
MW-5	2"	1410	1420	-	9.54	-	16.25	
MW-6	2"	1305	1310	-	11.75	-	16.50	
MW-4	2"	1525	1530	-	12.21	-	17.50	
SMW-3	2"	1535	1540	=	9.09	-	17.10	
MW-211								Could not Access

Comments:

Notes:

- * If top of screen is submerged, allow at least 15 minutes for well equilibration following well cap removal.
- All measurements to be reported to nearest 0.01 ft.
- ID = Identification.
- LNAPL = Light Non-Aqueous Phase Liquid.
- Sheen = Discontinuous, non-measurable thickness of LNAPL (less than 0.01 ft).
- Trace = Continuous, non-measurable thickness of LNAPL.