ATC
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GROUNDWATER MONITORING REPORT
(Fourth Quarter 2016)

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

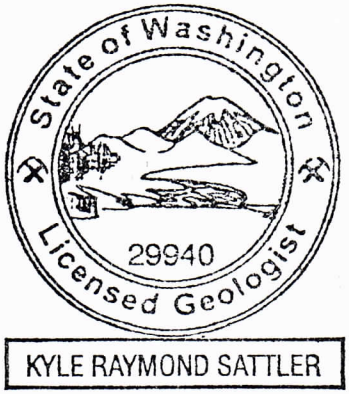
Submitted to:
Mr. Roger Nye
Washington State Department of Ecology
3190 160th Avenue Southeast
Bellevue, Washington 98008-5452

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

ATC Project No. Z076000073
February 23, 2017

Kyle Sattler, L.G.
Senior Project Manager



GROUNDWATER MONITORING REPORT
(Fourth 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:	06/28/16
Current remediation technique(s):	Soil Vapor Extraction/Air Sparge (system currently inactive during winter months).
Ecology VCP Number:	NW1714

FIELD ACTIVITY:	
Date(s) monitored and/or sampled:	12/13/16 – 12/15/16
Wells monitored:	20 (MW-41, MW-50, MW-54, MW-209 through MW-219, SMW-3, MWR-1, and MWR-3 through MWR-6. Could not locate MWR-2. Could not access well MW-45).
Wells sampled:	20 (same as those monitored).
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]):	8.40 (MWR-5)
Maximum depth to groundwater (feet below TOC):	15.25 (MW-41)
Average groundwater elevation (feet above mean sea level):	18.48 (wells MW-41, MW-50, MW-54, MW-209 through MW-219, SMW-3, MWR-1, and MWR-3 through MWR-6).
Change in average groundwater elevation since previous monitoring event (feet):	+4.31 (wells SMW-3, MWR-1, MWR-5, MWR-6, MW-213, MW-216 and MW-217)
Approximate groundwater gradient/flow direction (Average):	0.005 / North-Northeast
Previous groundwater gradient/flow direction:	0.002 / Southeast

GROUNDWATER CONDITIONS (12/13/16 - 12/15/16):	
Minimum dissolved phase gasoline-range hydrocarbons concentration excluding "non-detects" (micrograms per liter [µg/L]):	408 (MW-213)
Maximum dissolved phase gasoline-range hydrocarbons concentration (µg/L):	51,900 (MWR-5)
Maximum dissolved phase gasoline-range hydrocarbons concentration (µg/L) observed previous sampling event:	10,800 (MWR-5)
Minimum dissolved phase benzene concentration excluding "non-detects" (µg/L):	41.8 (MW-213)
Maximum dissolved phase benzene concentration (µg/L):	45.6 (MWR-5)
Maximum dissolved phase benzene concentration (µg/L) observed previous sampling event:	14.9 (MWR-5)
Minimum dissolved phase ethylbenzene concentration excluding "non-detects" (µg/L):	8.7 (MW-213)
Maximum dissolved phase ethylbenzene concentration (µg/L):	1,920 (MWR-5)
Maximum dissolved phase ethylbenzene concentration (µg/L) observed previous sampling event:	232 (MWR-5)
Minimum dissolved phase toluene concentration excluding "non-detects" (µg/L):	7.4 (MWR-5)
Maximum dissolved phase toluene concentration (µg/L):	7.4 (MWR-5)
Maximum dissolved phase toluene concentration (µg/L) observed previous sampling event:	All wells sampled were "non-detect"
Minimum dissolved phase total xylenes concentration excluding "non-detects" (µg/L):	3.2 (MW-213)
Maximum dissolved phase total xylenes concentration (µg/L):	6,350 (MWR-5)

Maximum dissolved phase total xylenes concentration (µg/L) observed previous sampling event:	519 (MWR-5)

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 detected in the sample collected from MWR-5, benzene detected in the samples collected from MW-213 and MWR-5, and ethylbenzene and total xylenes detected in the sample collected from MWR-5. Well MW-45 could not be located during this sampling event, and well MW-54 was inaccessible due to sludge encountered within the casing.

Purge water generated during the December 2016 groundwater monitoring and sampling event was placed in the first in-line liquid phase carbon vessel for treatment prior to discharge to the City's sewer system.

As noted above and shown on Figure 1, the general groundwater flow direction determined during this monitoring and sampling event is toward the north-northeast. Historical groundwater data indicates that the pre-dominant groundwater flow direction is toward the north-northeast (toward South Lake Union located approximately 500 feet north of the Site). 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 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. The next groundwater monitoring and sampling event scheduled for the first semester of 2017.

ATTACHMENTS:

Table 1 Summary of Historical Groundwater Gauging and Laboratory Analytical Data
Figure 1 Groundwater Conditions Map (12/13/16 – 12/15/16)
Figure 2 Groundwater Analytical Map (12/13/16 – 12/15/16)

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. TOC [a]	Sample Date	TPH-Gasoline (µg/L)	TPH-Diesel (µg/L)	TPH-Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphtha-lene (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)	EDB (µg/L)	EDC (µg/L)	Kerosone (µg/L)	DTW (feet)	SPH (feet)	GWE (feet)
MW-41	11/05/91	**<1,000**	**<1,000**	--	**67**	<0.5	<0.5	<0.5	--	--	--	--			--	--	--	--
27.00	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[c]	**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.																
	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
36.09	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.																
	12/13/16	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	15.25	0.00	20.84

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. TOC [a]	Sample Date	TPH-Gasoline (µg/L)	TPH-Diesel (µg/L)	TPH-Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphtha-lene (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)	EDB (µg/L)	EDC (µg/L)	Kerosone (µg/L)	DTW (feet)	SPH (feet)	GWE (feet)
MW-45	11/04/91	**17,000**	**2,000**	--		500	**1,000**	370	**2,300**	--	--	--			--	--	--	--
18.11	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 [b]	<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 [c]	**2,420**	**1,190**	**547**		394	3.41	204	**106**	--	--	--			--	10.20	0.00	7.91
	12/12/02	Obstructed by vehicle														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 [f,j]	<491 [j]		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	--
27.52	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 [f]		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.																
	12/13/16	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. TOC [a]	Sample Date	TPH-Gasoline (µg/L)	TPH-Diesel (µg/L)	TPH-Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphtha-lene (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)	EDB (µg/L)	EDC (µg/L)	Kerosone (µg/L)	DTW (feet)	SPH (feet)	GWE (feet)
MW-50	10/10/01	**8,970**	**2,200**	<606		674	221	382	**779**	--	--	--				11.11	0.00	8.69
19.80	12/28/01	**23,200**	**3,460**	<500		1,630	3,690	991	**4,480**	--	--	--				10.45	0.00	9.35
	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
	09/26/02	Obstructed by vehicle														NM	NM	--
	12/12/02	Obstructed by vehicle														NM	NM	--
	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
	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
	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
	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
	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** [g]	<503		20.3	10.7	42.3	**84.7**	8.01	--	--				10.58	0.00	9.22
	07/25/05	**1,500**	<250	<500		16.8	3.23	36.9	**50.11**	4.29	7.04	--				10.90	0.00	--
29.32	11/01/05	634	380 [g]	<472		15.9	2.49	0.52	2.19	5.62	--	--				10.60	0.00	18.72
	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** [J]	**1,870**	<485		28.4	2.13	24.7	**35.06**	3.88	9.48	<1				10.81	0.00	18.51
	08/29/06	264	<248	<495		8.55	0.780	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
	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** [J]	333	<495 [r]		28.0	1.00	6.46	5.20	1.85	**40.5**	<1				10.74	0.00	18.58
	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
	03/18/08	77.6	<236	<472	<236	1.02	0.58	1.85	<3	<1	<5	<1			<1	11.39	0.00	17.93
	06/03/08	Well covered by trailer truck, unable to sample														--	--	--
	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
	11/18/08	Thought to be Decommissioned														--	--	--
	11/15/09	630	**2,900** [Y]	<490	2.3	0.74	0.65	<2.0	<1.0	660 [H]	1.1	<1			**3000**	11.88	0.00	17.44
	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
	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
	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
	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
	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
	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
	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.																
29.00	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
	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
	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.																
	12/14/16	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	10.7	0.00	18.30

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. TOC [a]	Sample Date	TPH-Gasoline (µg/L)	TPH-Diesel (µg/L)	TPH-Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphtha-lene (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)	EDB (µg/L)	EDC (µg/L)	Kerosone (µg/L)	DTW (feet)	SPH (feet)	GWE (feet)
MW-54	06/16/05	206	130[j]	410	4.82	<1	2.09	10.27	<1	--	--	--			--	9.09	0.00	18.91
28.00	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[r]	<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	<0.5	<3	<1	<5	<1			<1	9.06		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	<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	<0.50	<2.0	<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	<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	<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	<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	<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	<3.0	--	<1.0	<10.0	--			<77.7	9.23	0.00	18.77
	06/14/11	<50.0	<84.2	<421	<1.0	<1.0	<1.0	<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	<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	<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	<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	<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	<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	<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	<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	<3.0	<1.0	--	<10.0	<10.0	<0.0098	<1.0	--	14.81	0.00	13.24
27.88	12/08/14	<100	--	--	<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	<3.0	--	--	--	--	--	--	--	9.91	0.00	17.97
	06/22/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	10.43	0.00	17.45
	09/10/15	<100	--	--	2.1	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	10.59	0.00	17.29
	12/07/15	<100	--	--	2.9	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	9.60	0.00	18.28
	06/28/16	Not Gauged or Sampled.																
	12/15/16	<100	--	--	1.9	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	9.80	0.00	18.08

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

Sample I.D. TOC [a]	Sample Date	TPH-Gasoline (µg/L)	TPH-Diesel (µg/L)	TPH-Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphtha-lene (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)	EDB (µg/L)	EDC (µg/L)	Kerosone (µg/L)	DTW (feet)	SPH (feet)	GWE (feet)
MW-209	11/05/08	<50.0	<238	<476	<0.500	<0.500	<0.500	<3.00	<1.00	<5.00	<1.00	<1.00			<238	9.22	0.00	18.66
27.00	02/23/09	Inaccessible														--	--	--
	05/17/09	Inaccessible														--	--	--
	08/17/09	Inaccessible														--	--	--
	11/17/09	Inaccessible														--	--	--
	02/22/10	<50.0	251	<388	<1.0	<1.0	<1.0	<3.0	--	<1.0	1.3	<0.10			<77.7	9.30	0.00	17.70
	05/24/10	<50.0	192	<396	<1.0	<1.0	<1.0	<3.0	--	<1.0	1.1	<0.10			137	8.04	0.00	18.96
	08/18/10	<50.0	86.7	<388	<1.0	<1.0	<1.0	<3.0	--	<1.0	1.3	<0.10			<77.7	8.86	0.00	18.14
	11/16/10	<50.0	85.1	<388	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0			<77.7	9.45	0.00	17.55
	03/01/11	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	--			<77.7	9.26	0.00	17.74
	06/15/11	<50.0	<82.5	<412	<1.0	<1.0	<1.0	<3.0	--	--	0.19	<0.10			--	8.10	0.00	18.90
	08/30/11	<50.0	<80.0	<400	<1.0	<1.0	<1.0	<3.0	--	<1.0	0.35	0.17			--	9.09	0.00	17.91
	12/06/11	<50.0	<82.5	<412	<1.0	<1.0	<1.0	<3.0	--	<10.0	0.12	0.18			<82.5	9.50	0.00	17.50
	02/15/12	<50.0	103	<412	<1.0	<1.0	<1.0	<3.0	--	2.1	<10.0	<10.0			<82.5	9.70	0.00	17.30
	05/16/12	<50.0	<79.2	<396	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0			<79.2	8.08	0.00	18.92
	08/15/12	<50.0	117	<426	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0			85.6	8.80	0.00	18.20
	11/21/12	<100	<100	<100	<1.0	<1.0	<1.0	<3.0	--	<4.0	<3.0	<3.0			<100	9.00	0.00	18.00
	11/06/13	<400	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0			<400	9.66	0.00	17.34
	07/29/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.0098	<1.0	--	10.36	0.00	16.64
26.88	12/09/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.0098	<1.0	--	9.61	0.00	17.27
	03/23/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	8.90	0.00	17.98
	06/23/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	8.98	0.00	17.90
	09/11/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	9.75	0.00	17.13
	12/07/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	8.77	0.00	18.11
	06/28/16	Not Gauged or Sampled.																
	12/15/16	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	9.60	0.00	17.28
MW-210	11/05/08	<50.0	<243	<485	<0.500	<0.500	<0.500	<3.00	<1.00	<5.00	<1.00	<1.00			<243	8.60	0.00	18.10
26.70	02/25/09	<50.0	<240	<481	<0.500	<0.500	<0.500	<3.00	--	<5.00	<1.00	<1.00			<240	5.90	0.00	20.80
	05/17/09	<50.0	<245	<490	<0.500	<0.500	<0.500	<3.00	<1.00	<5.00	<1.00	<1.00			<245	8.61	0.00	18.09
	08/17/09	<50	<240	<280	<0.50	<0.50	<0.50	<2.0	<1.0	<5.0	<5.0	<5.0			<240	9.60	0.00	17.10
	11/17/09	<50	<240	<490	<0.50	<0.50	<0.50[H]	<2.0	<1.0	<5.0	1.3	<1			<240	8.15	0.00	18.55
	02/22/10	<50.0	154	<381	<1.0	<1.0	<1.0	5.5	--	<1.0	0.31	0.21			<76.2	8.73	0.00	17.97
	05/24/10	<50.0	190	<385	<1.0	<1.0	<1.0	<3.0	--	<1.0	.45	<0.10			150	7.65	0.00	19.05
	08/18/10	<50.0	<78.4	<392	<1.0	<1.0	<1.0	<3.0	--	<1.0	.36	<0.10			<78.4	8.54	0.00	18.16
	11/16/10	<50.0	85.1	<388	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0			<77.7	8.81	0.00	17.89
	03/01/11	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	--			<77.7	8.77	0.00	17.93
	06/15/11	<50.0	<86.0	<430	<1.0	<1.0	<1.0	<3.0	--	--	0.27	<0.10			--	7.73	0.00	18.97
	08/30/11	<50.0	<87.0	<435	<1.0	<1.0	<1.0	<3.0	--	<1.0	<0.10	<0.10			<87.0	8.67	0.00	18.03
	12/06/11	<50.0	<86.2	<412	<1.0	<1.0	<1.0	<3.0	--	<1.0	<0.10	0.22			<82.5	8.95	0.00	17.75
	02/15/12	<50.0	<82.5	<412	<1.0	<1.0	<1.0	<3.0	--	2.1	<10.0	<10.0			<82.5	9.20	0.00	17.50
	05/16/12	<50.0	<83.3	<417	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0			<83.3	7.64	0.00	19.06
	08/15/12	<50.0	<85.1	<426	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0			<85.1	8.43	0.00	18.27
	11/21/12	<100	<100	<100	<1.0	<1.0	<1.0	<3.0	--	<4.0	<3.0	<3.0			<100	6.42	0.00	20.28
	11/06/13	<400	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0			<400	9.42	0.00	17.28
	07/29/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.010	<1.0	--	10.72	0.00	15.98
26.56	12/09/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.0099	<1.0	--	9.39	0.00	17.17
	03/23/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	8.54	0.00	18.02
	06/23/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	8.76	0.00	17.80
	09/11/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	9.45	0.00	17.11
	12/07/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	8.50	0.00	18.06
	06/28/16	Not Gauged or Sampled.																
	12/15/16	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	8.90	0.00	17.66
MW-211	11/05/08	<50.0	<240	<481	<0.500	<0.500	<0.500	<3.00	<1.00	<5.00	<1.00	<1.00			<240	7.23	0.00	19.32
26.55	02/25/09	<50.0	<240	<481	<0.500	<0.500	<0.500	<3.00	--	<5.00	<1.00	<1.00			<240	8.19	0.00	18.39
	05/17/09	<50.0	<236	<472	<0.500	<0.500	<0.500	<3.00	<1.00	<5.00	4.72	<1.00			<236	9.10	0.00	17.45
	08/17/09	<50	<240	<490	<0.50	<0.50	<0.50	<2.0	<1.0	<5.0	<5.0	<5.0			<240	9.74	0.00	16.81
	11/17/09	<50	<240	<480	<0.50	<0.50	<0.50	<2.0	<1.0	<5.0	<1	<1			<240	8.24	0.00	18.31
	02/22/10	<50.0	146	<385	<1.0	<1.0	<1.0	<3.0	--	<1.0	0.42	<0.10			<76.9	7.91	0.00	18.64
	05/24/10	<50.0	115	<388	<1.0	<1.0	<1.0	<3.0	--	<1.0	.46	.29			85.1	7.56	0.00	18.99
	08/18/10	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	<1.0	.34	.13			<77.7	8.42	0.00	18.13
	11/15/10	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0			<77.7	8.37	0.00	18.18
	03/01/11	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	--			<77.7	8.54	0.00	18.01
	06/15/11	<50.0	<84.2	<421	<1.0	<1.0	<1.0	<3.0	--	--	0.12	<0.10			--	5.61	0.00	20.94
	08/30/11	<50.0	<84.2	<421	<1.0	<1.0	<1.0	<3.0	--	<1.0	<0.10	<0.10			<84.2	8.48	0.00	18.07
	12/06/11	<50.0	<83.3	<417	<1.0	<1.0	<1.0	<3.0	--	<10.0	<0.10	0.15			<83.3	8.83	0.00	17.72
	02/15/12	<50.0	<75.5	<377	<1.0	<1.0	<1.0	<3.0	--	2.1	<10.0	<10.0			<75.5	9.10	0.00	17.45
	05/16/12	<50.0	<83.3	<417	<1.0	<1.0	<1.0	<3.0	--	4.0	<10.0	<10.0			<83.3	7.65	0.00	18.90
	08/15/12	<50.0	<88.9	<444	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0			<88.9	8.42	0.00	18.13
	11/21/12	<100	<100	<100	<1.0	<1.0	<1.0	<3.0	--	<4.0	<3.0	<3.0			<100	6.70	0.00	19.85
	11/06/13	<400	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0			<400	9.45	0.00	17.10
	07/29/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.0097	<1.0	--	12.24	0.00	14.31
26.48	12/09/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	**28.9**	<10.0	<0.0098	<1.0	--	9.67	0.00	16.81
	03/23/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	8.77	0.00	17.71
	06/22/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	8.91	0.00	17.57
	09/11/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	9.51	0.00	16.97
	12/07/15	Well Was Submerged Under Surface Water																
	06/28/16	Unable to access well, not gauged or sampled.																
	12/15/16	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	8.80	0.00	17.68

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. TOC [a]	Sample Date	TPH-Gasoline (µg/L)	TPH-Diesel (µg/L)	TPH-Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphtha-lene (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)	EDB (µg/L)	EDC (µg/L)	Kerosone (µg/L)	DTW (feet)	SPH (feet)	GWE (feet)
MW-212	09/30/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.021	<1.0	--	14.23	0.00	--
29.09	12/09/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.0097	<1.0	--	12.83	0.00	16.26
	03/23/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	11.53	0.00	17.56
	06/22/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	12.15	0.00	16.94
	09/11/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	11.87	0.00	17.22
	12/07/15	Well Was Inaccessible Due to Parked Vehicle Over Monument																
	06/28/16	Not Gauged or Sampled																
	12/13/16	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	10.60	0.00	18.49
MW-213	10/06/14	105	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	11.0	<10.0	<0.020	<1.0	--	11.63	0.00	--
27.35	12/08/14	<100	--	--	4.9	<1.0	<1.0	<3.0	<1.0	--	12.8	<10.0	<0.0098	<1.0	--	10.40	0.00	16.95
	03/23/15	364	--	--	**70.6**	<1.0	18.7	18.5	--	--	--	--	--	--	--	9.39	0.00	17.96
	6/23/2015[aa]	453	--	--	**43.1**	1.3	16.8	27.8	--	--	--	--	--	--	--	9.24	0.00	18.11
	6/23/2015[bb]	150	--	--	**9.4**	<1.0	6.1	3.1	--	--	--	--	--	--	--	9.24	0.00	18.11
	9/11/2015[cc]	638	--	--	2.2	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	9.98	0.00	17.37
	9/11/2015[dd]	<100	--	--	3.4	<1.0	1.4	<3.0	--	--	--	--	--	--	--	9.98	0.00	17.37
	12/07/15	<100	--	--	1.2	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	6.67	0.00	20.68
	06/28/16	<250	--	--	2.3	<0.50	5.5	3.2	--	--	--	--	--	--	--	9.41	0.00	17.94
	12/15/16	408	--	--	**41.8**	<1.0	8.7	3.2	--	--	--	--	--	--	--	9.00	0.00	18.35
MW-214	10/06/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.021	<1.0	--	12.14	0.00	--
27.33	12/08/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.010	<1.0	--	10.84	0.00	16.49
	03/23/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	9.45	0.00	17.88
	06/23/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	9.92	0.00	17.41
	09/11/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	10.00	0.00	17.33
	12/07/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	6.86	0.00	20.47
	06/28/16	Not Gauged or Sampled																
	12/15/16	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	8.50	0.00	18.83
MW-215	10/06/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.020	<1.0	--	12.25	0.00	--
27.21	12/08/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.0099	<1.0	--	11.14	0.00	16.07
	03/23/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	9.82	0.00	17.39
	06/23/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	9.98	0.00	17.23
	09/11/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	10.26	0.00	16.95
	12/07/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	6.24	0.00	20.97
	06/28/16	Not Gauged or Sampled																
	12/15/16	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	9.30	0.00	17.91
MW-216	10/03/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.020	<1.0	--	21.94	0.00	--
29.68	12/09/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.0096	<1.0	--	13.97	0.00	15.71
	03/23/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	12.43	0.00	17.25
	06/22/15	<100	--	--	2.3	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	12.85	0.00	16.83
	09/12/15	<100	--	--	1.4	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	12.68	0.00	17.00
	12/07/15	<100	--	--	**10.3**	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	11.57	0.00	18.11
	06/28/16	<250	--	--	<0.50	<0.50	<0.50	<1.5	--	--	--	--	--	--	--	13.01	0.00	16.67
	12/13/16	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	10.70	0.00	18.98
MW-217	10/03/14	<100	--	--	1.8	9.1	1.0	5.3	<1.0	--	<10.0	<10.0	<0.020	<1.0	--	23.64	0.00	--
30.08	12/09/14	<100	--	--	**6.1**	<1.0	<1.0	<3.0	<1.0	--	14.7	<10.0	<0.0096	<1.0	--	13.42	0.00	16.66
	03/23/15	<100	--	--	4.5	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	12.87	0.00	17.21
	06/22/15	105	--	--	4.8	<1.0	1	<3.0	--	--	--	--	--	--	--	13.13	0.00	16.95
	9/12/2015[ee]	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	12.42	0.00	17.66
	9/12/2015[ff]	197	--	--	4.4	<1.0	2.3	<3.0	--	--	--	--	--	--	--	12.42	0.00	17.66
	12/07/15	182	--	--	1.6	<1.0	3.0	<3.0	--	--	--	--	--	--	--	11.37	0.00	18.71
	06/28/16	<250	--	--	<0.50	<0.50	<0.50	<1.5	--	--	--	--	--	--	--	12.95	0.00	17.13
	12/13/16	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	11.35	0.00	18.73
MW-218	10/03/14	492	--	--	<1.0	3.0	<1.0	8.4	<1.0	--	<10.0	<10.0	<0.021	<1.0	--	20.62	0.00	--
29.64	12/09/14	616	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.010	<1.0	--	13.05	0.00	16.59
	03/23/15	353	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	11.71	0.00	17.93
	06/22/15	560	--	--	<1.0	<1.0	<1.0	5.6	--	--	--	--	--	--	--	12.29	0.00	17.35
	9/12/2015[gg]	614	--	--	<1.0	<1.0	1.1	11.2	--	--	--	--	--	--	--	11.94	0.00	17.70
	9/13/2015[hh]	258	--	--	<1.0	<1.0	1.2	11.4	--	--	--	--	--	--	--	11.94	0.00	17.70
	12/07/15	180	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	10.96	0.00	18.68
	06/28/16	Not Gauged or Sampled																
	12/13/16	515	--	--	<1.0	<1.0	<1.0	5.5	--	--	--	--	--	--	--	10.95	0.00	18.69
MW-219	10/06/14	147	--	--	<1.0	1.2	2.0	4.4	<1.0	--	<10.0	<10.0	<0.020	<1.0	--	14.18	0.00	--
27.41	12/09/14	197	--	--	1.0	<1.0	2.4	5.8	<1.0	--	<10.0	<10.0	<0.0098	<1.0	--	10.98	0.00	16.43
	03/23/15	<100	--	--	1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	9.91	0.00	17.50
	06/22/15	<100	--	--	1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	9.75	0.00	17.66
	09/10/15	<100	--	--	<1.0	<1.0	1.1	<3.0	--	--	--	--	--	--	--	10.52	0.00	16.89
	12/07/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	9.78	0.00	17.63
	06/28/16	Not Gauged or Sampled																
	12/13/16	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	9.90	0.00	17.51

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. TOC [a]	Sample Date	TPH-Gasoline (µg/L)	TPH-Diesel (µg/L)	TPH-Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphtha-lene (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)	EDB (µg/L)	EDC (µg/L)	Kerosone (µg/L)	DTW (feet)	SPH (feet)	GWE (feet)
SMW-3	03/08/95	<50	400	**2,500**	<0.5	<0.5	<0.5	<1	--	--	--	--			--	10.25	0.00	--
29.03	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[b]	<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[b]	<50	368	**<866**	<0.5	<0.5	<0.5	<1	--	--	--	--			--	7.23	0.00	--
	06/26/01	--	--	**--**	--	--	--	--	--	--	--	--			--	NM	NM	--
	09/07/01[b]	<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	--
29.03	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	--			--	11.84	0.00	17.19
	08/30/06	<80	<243	<485	<0.5	<0.5	<0.5	<3	<1	<5	<1	--			--			
	10/11/06	<50	<243	<485	<0.5	<0.5	<0.5	<3	<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	--			--	12.14	0.00	16.89
	03/08/07	<50	<250	<500	<0.5	<0.5	<0.5	<3	<1	<5	<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														--	--	--

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

Sample I.D. TOC [a]	Sample Date	TPH-Gasoline (µg/L)	TPH-Diesel (µg/L)	TPH-Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphtha-lene (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)	EDB (µg/L)	EDC (µg/L)	Kerosone (µg/L)	DTW (feet)	SPH (feet)	GWE (feet)
SMW-3	06/02/08	<50	<236	<472	<0.5	<0.5	<0.5	<3	<1	<5	<1	<1			<236	9.05	0.00	19.98
contd.	08/05/08	<50	<236	<472	<0.5	<0.5	<0.5	<3	<1	<5	4.54	<1			<236	7.64	0.00	21.39
27.40	11/04/08	<50.0	<238	<476	<0.500	<0.500	<0.500	<3.00		<5.00	5.88	<1.00			<238	9.70	0.00	17.70
	02/25/09	<50.0	<240	<481	<0.500	<0.500	<0.500	<3.00	--	<5.00	<1.00	<1.00			<240	9.90	0.00	17.50
	05/17/09	Not Accessible																
	08/17/09	<50	<250	<490	<0.50	<0.50	<0.50	<2.0	<1.0	<5.0	<5.0	<5.0			<250	10.10	0.00	17.30
	11/17/09	<50	<240	<490	<0.50	<0.50	<0.50	<2.0	<1.0	<5.0	1.2	<1			<240	9.53	0.00	17.87
	02/22/10	<50.0	107	**605**	<1.0	<1.0	<1.0	<3.0	--	<1.0	0.26	<0.10			<76.2	9.90	0.00	17.50
	05/24/10	<50.0	255	**510**	<1.0	<1.0	<1.0	<3.0	--	<1.0	.42	<0.10			100	8.50	0.00	18.90
	08/18/10	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	<1.0	.39	<0.10			<77.7	9.29	0.00	18.11
	11/16/10	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0			<77.7	10.11	0.00	17.29
	03/01/11	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	--			<77.7	9.85	0.00	17.55
	06/15/11	<50.0	<83.3	<417	<1.0	<1.0	<1.0	<3.0	--	--	0.21	<0.10			--	8.55	0.00	18.85
	08/30/11	<50.0	<86.0	<430	<1.0	<1.0	<1.0	<3.0	--	<1.0	0.13	0.14			<86.0	9.63	0.00	17.77
	12/06/11	<50.0	<82.5	<412	<1.0	<1.0	<1.0	<3.0	--	<10.0	0.13	0.38			<82.5	10.13	0.00	17.27
	02/15/12	<50.0	<82.5	<412	<1.0	<1.0	<1.0	<3.0	--	2.1	<10.0	<10.0			<82.5	10.22	0.00	17.18
	05/16/12	<50.0	<83.3	<417	<1.0	<1.0	<1.0	<3.0	--	2.9	<10.0	<10.0			<83.3	8.64	0.00	18.76
	08/15/12	<50.0	<85.1	<426	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0			<85.1	9.30	0.00	18.10
	11/21/12	<100	<100	<100	<1.0	<1.0	<1.0	<3.0	--	<4.0	<3.0	<3.0			<100	9.16	0.00	18.24
	11/06/13	<400	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0			<400	10.10	0.00	17.30
	07/29/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.0099	<1.0	--	10.85	0.00	16.55
27.32	12/09/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	**119**	<10.0	<0.0098	<1.0	--	9.94	0.00	17.38
	03/23/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	9.39	0.00	17.93
	06/23/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	9.39	0.00	17.93
	09/11/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	10.25	0.00	17.07
	12/07/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	8.78	0.00	18.54
	06/28/16	Not Sampled														9.09	0.00	18.23
	12/15/16	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	10.20	0.00	17.12
MWR-1	11/17/10	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0			<77.7	9.75	0.00	20.16
29.91	03/03/11	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	--			<77.7	10.23	0.00	19.68
	06/15/11	<50.0	<83.3	<417	<1.0	<1.0	<1.0	<3.0	--	--	1.5	<0.10			--	10.28	0.00	19.63
	08/30/11	<50.0	<86.0	<430	<1.0	<1.0	<1.0	<3.0	--	<1.0	0.51	<0.10			--	10.97	0.00	18.94
	12/06/11	<50.0	<83.3	<417	<1.0	<1.0	<1.0	<3.0	--	<10.0	0.68	0.62			<83.3	10.80	0.00	19.11
	02/16/12	<50.0	<81.6	<408	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0			<81.6	10.51	0.00	19.40
	05/15/12	<50.0	<81.6	<408	<1.0	<1.0	<1.0	<3.0	--	3.8	<10.0	<10.0			<81.6	10.20	0.00	19.71
	08/15/12	<50.0	<85.1	<426	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0			<85.1	10.65	0.00	19.26
	11/20/12	<100	<100	<100	<1.0	<1.0	<1.0	<3.0	--	<4.0	<3.0	<3.0			<100	8.82	0.00	21.09
	11/06/13	<400	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0			<400	12.04	0.00	17.87
	07/29/14	Well was dry																
29.86	12/08/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.0099	<1.0	--	12.51	0.00	17.35
	03/23/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	11.13	0.00	18.73
	06/22/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	12.43	0.00	17.43
	09/11/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	12.01	0.00	17.85
	12/07/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	10.58	0.00	19.28
	06/28/16	Not Sampled														12.21	0.00	17.65
	12/14/16	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	10.35	0.00	19.51
MWR-2	11/17/10	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	<1.0	11.7	<10.0			<77.7	8.08	0.00	20.17
28.25	03/01/11	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	<1.0	16.0	--			<77.7	8.61	0.00	19.64
	06/14/11	<50.0	<83.3	<417	<1.0	<1.0	<1.0	<3.0	--	--	3.1	<0.10			--	8.67	0.00	19.58
	08/29/11	<50.0	<83.3	<417	<1.0	<1.0	<1.0	<3.0	--	<1.0	0.35	0			<87.0	9.32	0.00	18.93
	12/06/11	<50.0	<86.0	<430	<1.0	<1.0	<1.0	<3.0	--	<10.0	1.3	<0.10			<86.0	9.09	0.00	19.16
	02/16/12	<50.0	<81.6	<408	<1.0	<1.0	<1.0	<3.0	--	2.0	<10.0	<10.0			<81.6	8.97	0.00	19.28
	05/15/12	<50.0	<75.8	<379	<1.0	<1.0	<1.0	<3.0	--	3.8	<10.0	<10.0			<75.8	8.62	0.00	19.63
	08/15/12	<50.0	<84.2	<421	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0			<84.2	9.05	0.00	19.20
	11/20/12	<100	<100	<100	<1.0	<1.0	<1.0	<3.0	--	<4.0	<3.0	<3.0			<100	7.32	0.00	20.93
	11/06/13	<400	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0			<400	10.33	0.00	17.92
	07/29/14	Well contained 0.65 foot of water in well cap; well was not sampled.																
28.16	12/08/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.0099	<1.0	--	12.51	0.00	15.65
	03/23/15	Could Not Locate Well																
	06/22/15	Could Not Locate Well																
	09/10/15	Could Not Locate Well																
	12/07/15	Could Not Locate Well																
	06/28/16	Not Gauged or Sampled																
	12/14/16	Could Not Locate Well																

Table 1
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Phillips 66 Site No. 255353 (AOC 1396)
600 Westlake Avenue North
Seattle, Washington

Sample I.D. TOC [a]	Sample Date	TPH-Gasoline (µg/L)	TPH-Diesel (µg/L)	TPH-Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphtha-lene (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)	EDB (µg/L)	EDC (µg/L)	Kerosone (µg/L)	DTW (feet)	SPH (feet)	GWE (feet)
MWR-3	11/17/10	<50.0	83.6	<385	<1.0	1.4	<1.0	<3.0	--	<1.0	<10.0	<10.0			**1,140**	9.82	0.00	19.94
29.76	03/01/11	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	--			<77.7	10.17	0.00	19.59
	06/15/11	<50.0	<82.5	<412	<1.0	<1.0	<1.0	<3.0	--	--	0.74	<0.10			--	10.18	0.00	19.58
	08/30/11	<50.0	<88.9	<444	<1.0	<1.0	<1.0	<3.0	--	<1.0	0.38	<0.10			<88.9	10.87	0.00	18.89
	12/06/11	<50.0	<86.0	<430	<1.0	<1.0	<1.0	<3.0	--	<10.0	<0.10	<0.10			<86.0	10.63	0.00	19.13
	02/16/12	<50.0	<81.6	<408	<1.0	<1.0	<1.0	<3.0	--	2.0	<10.0	<10.0			<81.6	10.51	0.00	19.25
	05/15/12	<50.0	<81.6	<408	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0			<81.6	10.22	0.00	19.54
	08/15/12	<50.0	<87.0	<435	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0			<87.0	10.56	0.00	19.20
	11/20/12	<100	<100	<100	<1.0	<1.0	<1.0	<3.0	--	<4.0	<3.0	<3.0			<100	9.86	0.00	19.90
	11/06/13	<400	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0			<400	11.52	0.00	18.24
	07/29/14	Well was dry																
29.67	12/08/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.0098	<1.0	--	12.52	0.00	17.15
	03/23/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	10.98	0.00	18.69
	06/22/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	12.37	0.00	17.30
	09/11/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	11.99	0.00	17.68
	12/07/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	10.34	0.00	19.33
	06/28/16	Not Gauged or Sampled																
	12/14/16	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	10.35	0.00	19.32
MWR-4	11/17/10	141	<76.9	<385	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0			140	8.98	0.00	19.90
28.88	03/01/11	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	--			132	9.44	0.00	19.44
	06/14/11	<50.0	<85.1	<426	<1.0	<1.0	<1.0	<3.0	--	--	0.63	<0.10			--	9.32	0.00	19.56
	08/29/11	<50.0	<82.5	<412	<1.0	<1.0	<1.0	<3.0	--	<1.0	0.18	0			<82.5	10.02	0.00	18.86
	12/06/11	<50.0	<83.3	<417	<1.0	<1.0	<1.0	<3.0	--	<10.0	<0.10	0.29			<83.3	9.78	0.00	19.10
	02/16/12	<50.0	<82.5	<412	<1.0	<1.0	<1.0	<3.0	--	2.0	<10.0	<10.0			<82.5	10.72	0.00	18.16
	05/15/12	<50.0	<81.6	<408	<1.0	<1.0	<1.0	<3.0	--	3.8	<10.0	<10.0			<81.6	9.32	0.00	19.56
	08/15/12	<50.0	<82.5	<412	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0			<82.5	9.82	0.00	19.06
	11/20/12	<100	<100	<100	<1.0	<1.0	<1.0	<3.0	--	<4.0	<3.0	<3.0			<100	9.31	0.00	19.57
	11/06/13	<400	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0			<400	11.02	0.00	17.86
	07/29/14	Well was dry																
28.80	12/08/14	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.0098	<1.0	--	12.06	0.00	16.74
	03/23/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	10.53	0.00	18.27
	06/22/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	11.55	0.00	17.25
	09/11/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	11.30	0.00	17.50
	12/07/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	10.07	0.00	18.73
	06/28/16	Not Gauged or Sampled																
	12/14/16	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	9.50	0.00	19.30
MWR-5	11/17/10	**15,900**	423	<388	**199**	371	592	**3,710**	--	157	<10.0	<10.0			**5,080**	7.91	0.00	19.36
27.27	02/28/11	**21,800**	368	<388	**195**	444	642	**3,430**	--	143	<10.0	--			**4,650**	8.60	0.00	18.67
	06/14/11	**22,700**	323	<400	**192**	383	**719**	**4,340**	--	--	4.1	0			**--**	7.82	0.00	19.45
	08/29/11	**35,400**	478	<408	**244**	271	**861**	**4,500**	--	**338**	0.95	0.62			**7,060**	8.50	0.00	18.77
	12/05/11	**30,500**	235	<412	**211**	450	**1,140**	**5,960**	--	**193**	1.3	0.52			**9,580**	7.75	0.00	19.52
	02/16/12	**9,490**	160	<396	**68.7**	9.1	218	**1,090**	--	88.2	<10.0	<10.0			**2,330**	8.93	0.00	18.34
	05/15/12	**27,900**	298	<404	**181**	160	**813**	**4,830**	--	**226**	<10.0	<10.0			**4,650**	8.01	0.00	19.26
	08/14/12	**7,720**	329	<440	**60.5**	3.80	244	**1,280**	--	81.3	<10.0	<10.0			**2,560**	8.62	0.00	18.65
	11/20/12	**35,500**	**15,500**	<100	**306**	471	**1,520**	**10,700**	--	**342**	5.8	<3.0			**20,500**	5.11	0.00	22.16
	11/06/13	**3,820**	<400	<400	**23.0**	<1.0	150	286	<1.0	--	<10.0	<10.0			**1,100**	9.45	0.00	17.82
	07/29/14	Well was dry																
27.12	12/08/14	**20,400**	--	--	<1.0	2.1	430	**1,400**	<1.0	--	<10.0	<10.0	<0.010	<1.0	--	10.54	0.00	16.58
	03/23/15	**11,900**	--	--	**31.0**	1.4	459	**1,030**	<1.0	--	<10.0	<10.0	<0.010	<1.0	--	8.98	0.00	18.14
	06/22/15	**14,700**	--	--	**22.9**	<10.0	455	843	--	--	--	--	--	--	--	9.98	0.00	17.14
	09/10/15	**10,700**	--	--	**35.0**	1.1	223	644	--	--	--	--	--	--	--	9.51	0.00	17.61
	12/07/15	Well Submerged Under Surface Water																
	06/28/16	**10,800**	--	--	**14.9**	<1.2	232	519	--	--	--	--	--	--	--	9.54	0.00	17.58
	12/14/16	**51,900**	--	--	**45.6**	7.4	**1,920**	**6,350**	--	--	--	--	--	--	--	8.45	0.00	18.67
MWR-6	11/16/10	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0			<77.7	10.10	0.00	19.15
29.25	02/28/11	<50.0	<77.7	<388	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	--			<77.7	10.89	0.00	18.36
	06/14/11	<50.0	<80.8	<404	<1.0	<1.0	<1.0	<3.0	--	--	1.3	<0.10			--	10.11	0.00	19.14
	08/29/11	<50.0	<87.0	<435	<1.0	<1.0	<1.0	<3.0	--	<1.0	0.3	<0.10			--	10.75	0.00	18.50
	12/05/11	<50.0	<82.5	<412	<1.0	<1.0	<1.0	<3.0	--	<10.0	0.54	0.11			<82.5	9.48	0.00	19.77
	02/16/12	<50.0	<75.5	<377	<1.0	<1.0	<1.0	<3.0	--	2.8	<10.0	<10.0			<75.5	11.90	0.00	17.35
	05/15/12	<50.0	<81.6	<408	<1.0	<1.0	<1.0	<3.0	--	3.8	<10.0	<10.0			<81.6	10.26	0.00	18.99
	08/14/12	<50.0	<85.1	<426	<1.0	<1.0	<1.0	<3.0	--	<1.0	<10.0	<10.0			<85.1	10.45	0.00	18.80
	11/20/12	<100	<100	<100	<1.0	<1.0	<1.0	<3.0	--	<4.0	<3.0	<3.0			<100	9.59	0.00	19.66
	11/06/13	<400	<400	<400	<1.0	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0			<400	11.77	0.00	17.48
	07/29/14	Well was dry																
29.12	12/08/14	<100	--	--	**5.1**	<1.0	<1.0	<3.0	<1.0	--	<10.0	<10.0	<0.0098	<1.0	--	12.51	0.00	16.61
	03/23/15	<100	--	--	1.7	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	11.66	0.00	17.46
	06/22/15	<100	--	--	1.6	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	12.38	0.00	16.74
	09/11/15	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	11.98	0.00	17.14
	12/07/15	<100	--	--	1.9	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	10.89	0.00	18.23
	06/28/16	<250	--	--	<0.50	<0.50	<0.50	<1.5	--	--	--	--	--	--	--	11.75	0.00	17.37
	12/14/16	<100	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	10.85	0.00	18.27
MTCA Method A Cleanup Level for Groundwater		**1000/800[k]**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**160**	**15**	**15**			**500**	**--**	**--**	**--**

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] Anlaysis 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 ug/L if benzene is not detectable in the groundwater sample. Otherwise, the action level is 800 ug/L.

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

[m] Surogate 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] Dilluted 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.

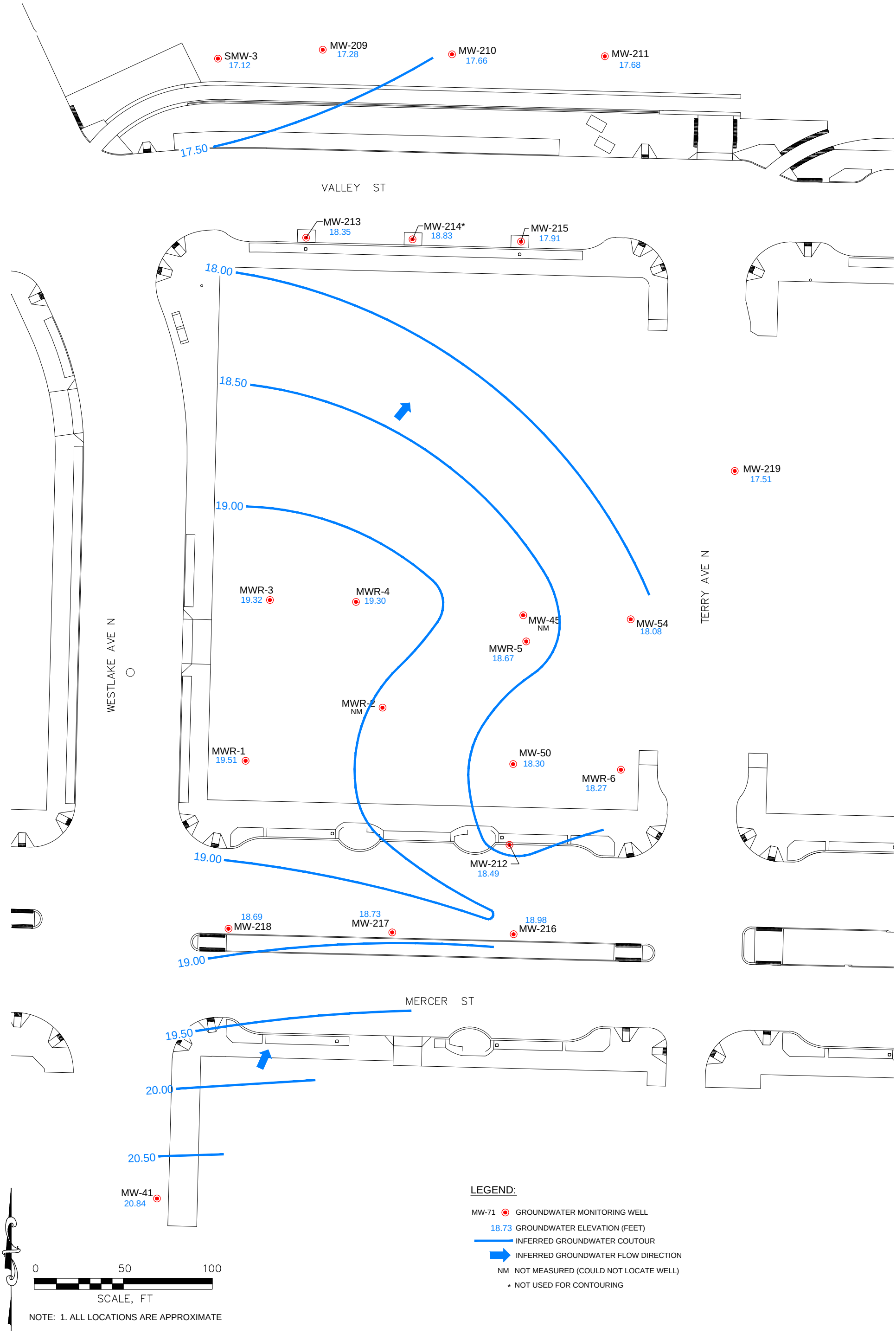
[ff] Sample collected immediately after High Intensity Targeted Extraction Event on September 12 , 2015.

[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.

"--[u]" = Due to laboratory error, the samples were not analyzed for EPA 8260B compounds.

FIGURES



GROUNDWATER CONDITIONS MAP
(12/13/16 - 12/15/16)

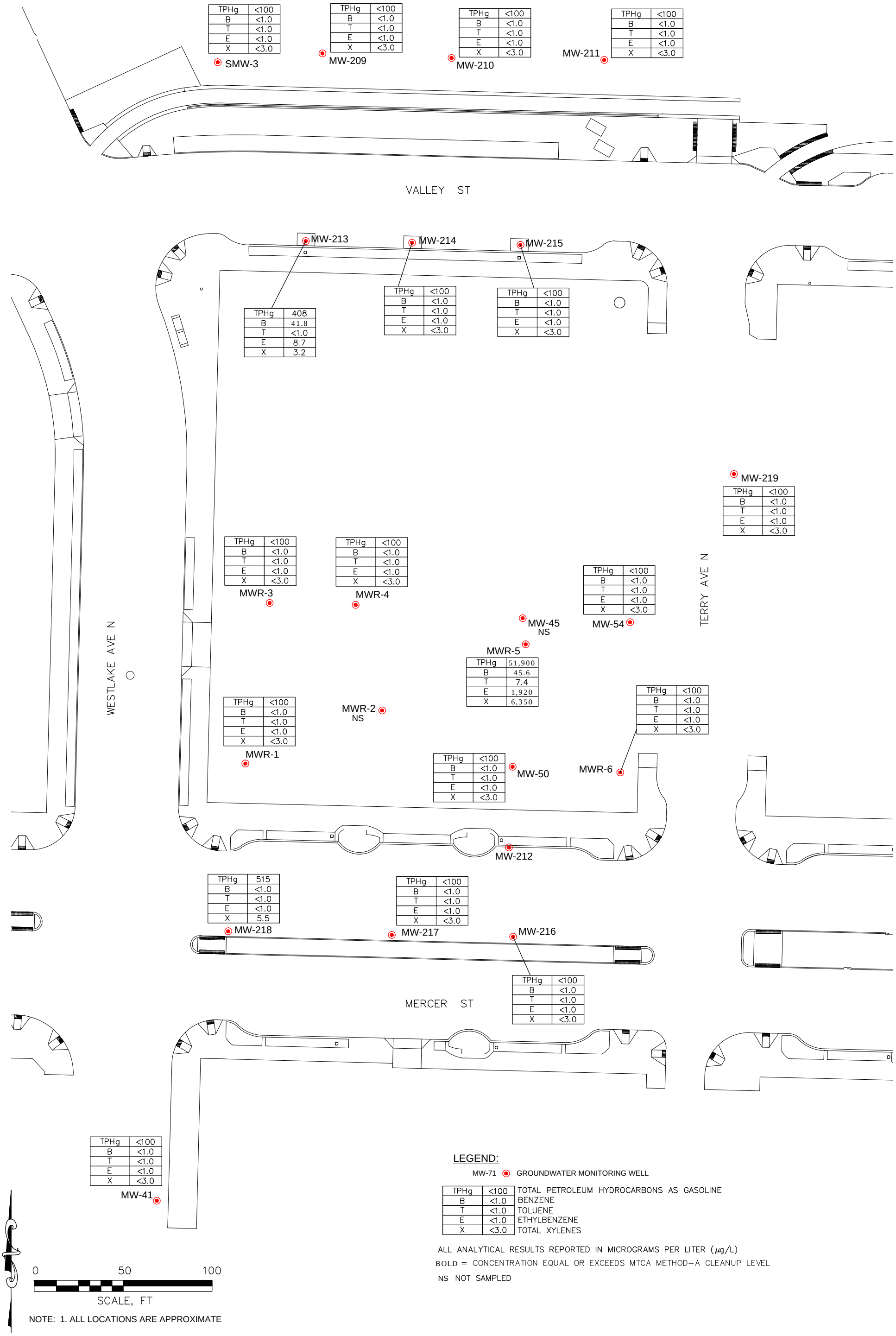
PHILLIPS 66 FACILITY NO. 255353 (AOC 1396)

600 WESTLAKE AVENUE N

SEATTLE, WA

PROJECT NUMBER: Z076000073		DATE: 1/19/17	FIGURE 1
APPROVED BY: KS		DRAWN BY: BK	

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



NOTE: 1. ALL LOCATIONS ARE APPROXIMATE

LEGEND:

MW-71 GROUNDWATER MONITORING WELL

TPHg	<100	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
B	<1.0	BENZENE
T	<1.0	TOLUENE
E	<1.0	ETHYLBENZENE
X	<3.0	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

GROUNDWATER CONDITIONS MAP (12/13/16 - 12/15/16)

PHILLIPS 66 FACILITY NO. 255353 (AOC 1396)

600 WESTLAKE AVENUE N

SEATTLE, WA

PROJECT NUMBER: Z076000073		DATE: 1/19/17	FIGURE 2
APPROVED BY: KS		DRAWN BY: BK	

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

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

December 28, 2016

Kyle Sattler
ATC Group Services LLC
6347 Seaview Ave NW
Seattle, WA 98107

RE: Project: AOC 1396
Pace Project No.: 10373641

Dear Kyle Sattler:
Enclosed are the analytical results for sample(s) received by the laboratory on December 17, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC 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

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: AOC 1396
Pace Project No.: 10373641

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
Alaska Certification UST-107
525 N 8th Street, Salina, KS 67401
A2LA Certification #: 2926.01
Alaska Certification #: UST-078
Alaska Certification #MN00064
Alabama Certification #40770
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
Colorado Certification #Pace
Connecticut Certification #: PH-0256
EPA Region 8 Certification #: 8TMS-L
Florida/NELAP Certification #: E87605
Guam Certification #:14-008r
Georgia Certification #: 959
Georgia EPD #: Pace
Idaho Certification #: MN00064
Hawaii Certification #MN00064
Illinois Certification #: 200011
Indiana Certification#C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky Dept of Envi. Protection - DW #90062
Kentucky Dept of Envi. Protection - WW #:90062
Louisiana DEQ Certification #: 3086
Louisiana DHH #: LA140001
Maine Certification #: 2013011
Maryland Certification #: 322
Michigan DEPH Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT0092
Nevada Certification #: MN_00064
Nebraska Certification #: Pace
New Jersey Certification #: MN-002
New York Certification #: 11647
North Carolina Certification #: 530
North Carolina State Public Health #: 27700
North Dakota Certification #: R-036
Ohio EPA #: 4150
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Oregon Certification #: MN300001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Saipan (CNMI) #:MP0003
South Carolina #:74003001
Texas Certification #: T104704192
Tennessee Certification #: 02818
Utah Certification #: MN000642013-4
Virginia DGS Certification #: 251
Virginia/VELAP Certification #: Pace
Washington Certification #: C486
West Virginia Certification #: 382
West Virginia DHHR #:9952C
Wisconsin Certification #: 999407970

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: AOC 1396
Pace Project No.: 10373641

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10373641001	**Trip Blank**	Water	12/13/16 00:00	12/17/16 10:50
10373641002	**MW-41**	Water	12/13/16 13:10	12/17/16 10:50
10373641003	**MW-50**	Water	12/14/16 15:10	12/17/16 10:50
10373641004	**MW-54**	Water	12/15/16 12:30	12/17/16 10:50
10373641005	**MW-209**	Water	12/15/16 14:30	12/17/16 10:50
10373641006	**MW-210**	Water	12/15/16 14:05	12/17/16 10:50
10373641007	**MW-211**	Water	12/15/16 14:00	12/17/16 10:50
10373641008	**MW-212**	Water	12/13/16 12:30	12/17/16 10:50
10373641009	**MW-213**	Water	12/15/16 08:20	12/17/16 10:50
10373641010	**MW-214**	Water	12/15/16 09:20	12/17/16 10:50
10373641011	**MW-215**	Water	12/15/16 10:00	12/17/16 10:50
10373641012	**MW-216**	Water	12/13/16 10:40	12/17/16 10:50
10373641013	**MW-217**	Water	12/13/16 11:12	12/17/16 10:50
10373641014	**MW-218**	Water	12/13/16 11:48	12/17/16 10:50
10373641015	**MW-219**	Water	12/13/16 15:55	12/17/16 10:50
10373641016	**SMW-3**	Water	12/15/16 15:00	12/17/16 10:50
10373641017	**MWR-1**	Water	12/14/16 10:10	12/17/16 10:50
10373641018	**MWR-3**	Water	12/14/16 11:00	12/17/16 10:50
10373641019	**MWR-4**	Water	12/14/16 11:30	12/17/16 10:50
10373641020	**MWR-5**	Water	12/14/16 13:25	12/17/16 10:50
10373641021	**MWR-6**	Water	12/14/16 14:35	12/17/16 10:50

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SAMPLE ANALYTE COUNT

Project: AOC 1396
Pace Project No.: 10373641

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10373641001	Trip Blank	EPA 8260B	EMC	4	PASI-M
10373641002	MW-41	NWTPH-Gx	KMZ	2	PASI-M
		EPA 8260B	EMC	7	PASI-M
10373641003	MW-50	NWTPH-Gx	KMZ	2	PASI-M
		EPA 8260B	AH2	7	PASI-M
10373641004	MW-54	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	AH2	7	PASI-M
10373641005	MW-209	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	AH2	7	PASI-M
10373641006	MW-210	NWTPH-Gx	KMZ	2	PASI-M
		EPA 8260B	AH2	7	PASI-M
10373641007	MW-211	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	AH2	7	PASI-M
10373641008	MW-212	NWTPH-Gx	KMZ	2	PASI-M
		EPA 8260B	EMC	7	PASI-M
10373641009	MW-213	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	AH2	7	PASI-M
10373641010	MW-214	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	AH2	7	PASI-M
10373641011	MW-215	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	AH2	7	PASI-M
10373641012	MW-216	NWTPH-Gx	KMZ	2	PASI-M
		EPA 8260B	EMC	7	PASI-M
10373641013	MW-217	NWTPH-Gx	KMZ	2	PASI-M
		EPA 8260B	EMC	7	PASI-M
10373641014	MW-218	NWTPH-Gx	KMZ	2	PASI-M
		EPA 8260B	EMC	7	PASI-M
10373641015	MW-219	NWTPH-Gx	KMZ	2	PASI-M
		EPA 8260B	EMC	7	PASI-M
10373641016	SMW-3	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	AH2	7	PASI-M
10373641017	MWR-1	NWTPH-Gx	KMZ	2	PASI-M
		EPA 8260B	AH2	7	PASI-M
10373641018	MWR-3	NWTPH-Gx	KMZ	2	PASI-M
		EPA 8260B	AH2	7	PASI-M
10373641019	MWR-4	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	AH2	7	PASI-M

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SAMPLE ANALYTE COUNT

Project: AOC 1396
Pace Project No.: 10373641

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10373641020	**MWR-5**	NWTPH-Gx	KMZ	2	PASI-M
		EPA 8260B	AH2	7	PASI-M
10373641021	**MWR-6**	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	AH2	7	PASI-M

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ANALYTICAL RESULTS

Project: AOC 1396
Pace Project No.: 10373641

Sample: Trip Blank **Lab ID: 10373641001** Collected: 12/13/16 00:00 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/19/16 17:49	71-43-2	
Surrogates								
1,2-Dichloroethane-d4 (S)	116	%.	75-125	1		12/19/16 17:49	17060-07-0	
Toluene-d8 (S)	101	%.	75-125	1		12/19/16 17:49	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	75-125	1		12/19/16 17:49	460-00-4	

Sample: MW-41 **Lab ID: 10373641002** Collected: 12/13/16 13:10 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	ND	ug/L	100	1		12/21/16 13:48		
Surrogates								
a,a,a-Trifluorotoluene (S)	88	%.	50-150	1		12/21/16 13:48	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/19/16 18:51	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/19/16 18:51	100-41-4	
Toluene	ND	ug/L	1.0	1		12/19/16 18:51	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/19/16 18:51	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	119	%.	75-125	1		12/19/16 18:51	17060-07-0	
Toluene-d8 (S)	101	%.	75-125	1		12/19/16 18:51	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	75-125	1		12/19/16 18:51	460-00-4	

Sample: MW-50 **Lab ID: 10373641003** Collected: 12/14/16 15:10 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	ND	ug/L	100	1		12/21/16 17:53		
Surrogates								
a,a,a-Trifluorotoluene (S)	85	%.	50-150	1		12/21/16 17:53	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/20/16 17:27	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/20/16 17:27	100-41-4	
Toluene	ND	ug/L	1.0	1		12/20/16 17:27	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/20/16 17:27	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	104	%.	75-125	1		12/20/16 17:27	17060-07-0	
Toluene-d8 (S)	98	%.	75-125	1		12/20/16 17:27	2037-26-5	
4-Bromofluorobenzene (S)	108	%.	75-125	1		12/20/16 17:27	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AOC 1396
Pace Project No.: 10373641

Sample: MW-54 **Lab ID: 10373641004** Collected: 12/15/16 12:30 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	ND	ug/L	100	1		12/22/16 14:00		
Surrogates								
a,a,a-Trifluorotoluene (S)	84	%.	50-150	1		12/22/16 14:00	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	**1.9**	ug/L	1.0	1		12/21/16 00:38	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/21/16 00:38	100-41-4	
Toluene	ND	ug/L	1.0	1		12/21/16 00:38	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/21/16 00:38	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	108	%.	75-125	1		12/21/16 00:38	17060-07-0	
Toluene-d8 (S)	97	%.	75-125	1		12/21/16 00:38	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	75-125	1		12/21/16 00:38	460-00-4	

Sample: MW-209 **Lab ID: 10373641005** Collected: 12/15/16 14:30 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	ND	ug/L	100	1		12/22/16 14:42		
Surrogates								
a,a,a-Trifluorotoluene (S)	83	%.	50-150	1		12/22/16 14:42	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/21/16 00:55	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/21/16 00:55	100-41-4	
Toluene	ND	ug/L	1.0	1		12/21/16 00:55	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/21/16 00:55	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	109	%.	75-125	1		12/21/16 00:55	17060-07-0	
Toluene-d8 (S)	97	%.	75-125	1		12/21/16 00:55	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	75-125	1		12/21/16 00:55	460-00-4	

Sample: MW-210 **Lab ID: 10373641006** Collected: 12/15/16 14:05 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	ND	ug/L	100	1		12/22/16 11:57		
Surrogates								
a,a,a-Trifluorotoluene (S)	87	%.	50-150	1		12/22/16 11:57	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/20/16 22:03	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/20/16 22:03	100-41-4	

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ANALYTICAL RESULTS

Project: AOC 1396
Pace Project No.: 10373641

Sample: MW-210 **Lab ID: 10373641006** Collected: 12/15/16 14:05 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV UST	Analytical Method: EPA 8260B							
Toluene	ND	ug/L	1.0	1		12/20/16 22:03	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/20/16 22:03	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	106	%.	75-125	1		12/20/16 22:03	17060-07-0	
Toluene-d8 (S)	96	%.	75-125	1		12/20/16 22:03	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	75-125	1		12/20/16 22:03	460-00-4	

Sample: MW-211 **Lab ID: 10373641007** Collected: 12/15/16 14:00 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	ND	ug/L	100	1		12/22/16 15:03		
Surrogates								
a,a,a-Trifluorotoluene (S)	85	%.	50-150	1		12/22/16 15:03	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/21/16 01:13	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/21/16 01:13	100-41-4	
Toluene	ND	ug/L	1.0	1		12/21/16 01:13	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/21/16 01:13	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	106	%.	75-125	1		12/21/16 01:13	17060-07-0	
Toluene-d8 (S)	97	%.	75-125	1		12/21/16 01:13	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	75-125	1		12/21/16 01:13	460-00-4	

Sample: MW-212 **Lab ID: 10373641008** Collected: 12/13/16 12:30 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	ND	ug/L	100	1		12/21/16 14:08		
Surrogates								
a,a,a-Trifluorotoluene (S)	85	%.	50-150	1		12/21/16 14:08	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/19/16 19:06	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/19/16 19:06	100-41-4	
Toluene	ND	ug/L	1.0	1		12/19/16 19:06	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/19/16 19:06	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	121	%.	75-125	1		12/19/16 19:06	17060-07-0	
Toluene-d8 (S)	101	%.	75-125	1		12/19/16 19:06	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125	1		12/19/16 19:06	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AOC 1396
Pace Project No.: 10373641

Sample: MW-213 **Lab ID: 10373641009** Collected: 12/15/16 08:20 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	**408**	ug/L	100	1		12/22/16 15:24		
Surrogates								
a,a,a-Trifluorotoluene (S)	90	%.	50-150	1		12/22/16 15:24	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	**41.8**	ug/L	1.0	1		12/21/16 01:30	71-43-2	
Ethylbenzene	**8.7**	ug/L	1.0	1		12/21/16 01:30	100-41-4	
Toluene	ND	ug/L	1.0	1		12/21/16 01:30	108-88-3	
Xylene (Total)	**3.2**	ug/L	3.0	1		12/21/16 01:30	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	107	%.	75-125	1		12/21/16 01:30	17060-07-0	
Toluene-d8 (S)	97	%.	75-125	1		12/21/16 01:30	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	75-125	1		12/21/16 01:30	460-00-4	

Sample: MW-214 **Lab ID: 10373641010** Collected: 12/15/16 09:20 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	ND	ug/L	100	1		12/22/16 15:45		
Surrogates								
a,a,a-Trifluorotoluene (S)	84	%.	50-150	1		12/22/16 15:45	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/21/16 01:47	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/21/16 01:47	100-41-4	
Toluene	ND	ug/L	1.0	1		12/21/16 01:47	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/21/16 01:47	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	110	%.	75-125	1		12/21/16 01:47	17060-07-0	
Toluene-d8 (S)	98	%.	75-125	1		12/21/16 01:47	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	75-125	1		12/21/16 01:47	460-00-4	

Sample: MW-215 **Lab ID: 10373641011** Collected: 12/15/16 10:00 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	ND	ug/L	100	1		12/22/16 16:05		
Surrogates								
a,a,a-Trifluorotoluene (S)	85	%.	50-150	1		12/22/16 16:05	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/21/16 02:04	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/21/16 02:04	100-41-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AOC 1396
Pace Project No.: 10373641

Sample: MW-215 **Lab ID: 10373641011** Collected: 12/15/16 10:00 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV UST	Analytical Method: EPA 8260B							
Toluene	ND	ug/L	1.0	1		12/21/16 02:04	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/21/16 02:04	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	109	%.	75-125	1		12/21/16 02:04	17060-07-0	
Toluene-d8 (S)	99	%.	75-125	1		12/21/16 02:04	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	75-125	1		12/21/16 02:04	460-00-4	

Sample: MW-216 **Lab ID: 10373641012** Collected: 12/13/16 10:40 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	ND	ug/L	100	1		12/21/16 14:29		
Surrogates								
a,a,a-Trifluorotoluene (S)	90	%.	50-150	1		12/21/16 14:29	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/19/16 20:24	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/19/16 20:24	100-41-4	
Toluene	ND	ug/L	1.0	1		12/19/16 20:24	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/19/16 20:24	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	119	%.	75-125	1		12/19/16 20:24	17060-07-0	
Toluene-d8 (S)	100	%.	75-125	1		12/19/16 20:24	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	75-125	1		12/19/16 20:24	460-00-4	

Sample: MW-217 **Lab ID: 10373641013** Collected: 12/13/16 11:12 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	ND	ug/L	100	1		12/21/16 19:15		
Surrogates								
a,a,a-Trifluorotoluene (S)	86	%.	50-150	1		12/21/16 19:15	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/19/16 19:22	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/19/16 19:22	100-41-4	
Toluene	ND	ug/L	1.0	1		12/19/16 19:22	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/19/16 19:22	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	120	%.	75-125	1		12/19/16 19:22	17060-07-0	
Toluene-d8 (S)	101	%.	75-125	1		12/19/16 19:22	2037-26-5	
4-Bromofluorobenzene (S)	96	%.	75-125	1		12/19/16 19:22	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AOC 1396
Pace Project No.: 10373641

Sample: MW-218 **Lab ID: 10373641014** Collected: 12/13/16 11:48 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	**515**	ug/L	100	1		12/21/16 19:36		
Surrogates								
a,a,a-Trifluorotoluene (S)	85	%.	50-150	1		12/21/16 19:36	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/19/16 19:37	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/19/16 19:37	100-41-4	
Toluene	ND	ug/L	1.0	1		12/19/16 19:37	108-88-3	
Xylene (Total)	**5.5**	ug/L	3.0	1		12/19/16 19:37	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	117	%.	75-125	1		12/19/16 19:37	17060-07-0	
Toluene-d8 (S)	102	%.	75-125	1		12/19/16 19:37	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	75-125	1		12/19/16 19:37	460-00-4	

Sample: MW-219 **Lab ID: 10373641015** Collected: 12/13/16 15:55 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	ND	ug/L	100	1		12/21/16 15:10		
Surrogates								
a,a,a-Trifluorotoluene (S)	87	%.	50-150	1		12/21/16 15:10	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/19/16 19:53	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/19/16 19:53	100-41-4	
Toluene	ND	ug/L	1.0	1		12/19/16 19:53	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/19/16 19:53	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	118	%.	75-125	1		12/19/16 19:53	17060-07-0	
Toluene-d8 (S)	101	%.	75-125	1		12/19/16 19:53	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125	1		12/19/16 19:53	460-00-4	

Sample: SMW-3 **Lab ID: 10373641016** Collected: 12/15/16 15:00 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	ND	ug/L	100	1		12/22/16 16:27		
Surrogates								
a,a,a-Trifluorotoluene (S)	87	%.	50-150	1		12/22/16 16:27	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/21/16 02:21	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/21/16 02:21	100-41-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AOC 1396
Pace Project No.: 10373641

Sample: SMW-3 **Lab ID: 10373641016** Collected: 12/15/16 15:00 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV UST	Analytical Method: EPA 8260B							
Toluene	ND	ug/L	1.0	1		12/21/16 02:21	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/21/16 02:21	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	111	%.	75-125	1		12/21/16 02:21	17060-07-0	
Toluene-d8 (S)	99	%.	75-125	1		12/21/16 02:21	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	75-125	1		12/21/16 02:21	460-00-4	

Sample: MWR-1 **Lab ID: 10373641017** Collected: 12/14/16 10:10 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	ND	ug/L	100	1		12/21/16 18:34		
Surrogates								
a,a,a-Trifluorotoluene (S)	84	%.	50-150	1		12/21/16 18:34	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/20/16 17:44	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/20/16 17:44	100-41-4	
Toluene	ND	ug/L	1.0	1		12/20/16 17:44	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/20/16 17:44	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	104	%.	75-125	1		12/20/16 17:44	17060-07-0	
Toluene-d8 (S)	99	%.	75-125	1		12/20/16 17:44	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	75-125	1		12/20/16 17:44	460-00-4	

Sample: MWR-3 **Lab ID: 10373641018** Collected: 12/14/16 11:00 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	ND	ug/L	100	1		12/21/16 18:54		
Surrogates								
a,a,a-Trifluorotoluene (S)	85	%.	50-150	1		12/21/16 18:54	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/20/16 18:01	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/20/16 18:01	100-41-4	
Toluene	ND	ug/L	1.0	1		12/20/16 18:01	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/20/16 18:01	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	108	%.	75-125	1		12/20/16 18:01	17060-07-0	
Toluene-d8 (S)	97	%.	75-125	1		12/20/16 18:01	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	75-125	1		12/20/16 18:01	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AOC 1396
Pace Project No.: 10373641

Sample: MWR-4 **Lab ID: 10373641019** Collected: 12/14/16 11:30 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	ND	ug/L	100	1		12/22/16 13:19		
Surrogates								
a,a,a-Trifluorotoluene (S)	83	%.	50-150	1		12/22/16 13:19	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/20/16 18:19	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/20/16 18:19	100-41-4	
Toluene	ND	ug/L	1.0	1		12/20/16 18:19	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/20/16 18:19	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	108	%.	75-125	1		12/20/16 18:19	17060-07-0	
Toluene-d8 (S)	96	%.	75-125	1		12/20/16 18:19	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	75-125	1		12/20/16 18:19	460-00-4	

Sample: MWR-5 **Lab ID: 10373641020** Collected: 12/14/16 13:25 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	**51900**	ug/L	5000	50		12/28/16 12:30		
Surrogates								
a,a,a-Trifluorotoluene (S)	92	%.	50-150	50		12/28/16 12:30	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	**45.6**	ug/L	2.0	2		12/20/16 13:42	71-43-2	
Ethylbenzene	**1920**	ug/L	50.0	50		12/22/16 14:25	100-41-4	
Toluene	**7.4**	ug/L	2.0	2		12/20/16 13:42	108-88-3	
Xylene (Total)	**6350**	ug/L	150	50		12/22/16 14:25	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	101	%.	75-125	2		12/20/16 13:42	17060-07-0	
Toluene-d8 (S)	97	%.	75-125	2		12/20/16 13:42	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	75-125	2		12/20/16 13:42	460-00-4	

Sample: MWR-6 **Lab ID: 10373641021** Collected: 12/14/16 14:35 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	ND	ug/L	100	1		12/22/16 13:39		
Surrogates								
a,a,a-Trifluorotoluene (S)	84	%.	50-150	1		12/22/16 13:39	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/20/16 18:36	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/20/16 18:36	100-41-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AOC 1396
Pace Project No.: 10373641

Sample: MWR-6 **Lab ID: 10373641021** Collected: 12/14/16 14:35 Received: 12/17/16 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV UST	Analytical Method: EPA 8260B							
Toluene	ND	ug/L	1.0	1		12/20/16 18:36	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/20/16 18:36	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	106	%.	75-125	1		12/20/16 18:36	17060-07-0	
Toluene-d8 (S)	96	%.	75-125	1		12/20/16 18:36	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	75-125	1		12/20/16 18:36	460-00-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: AOC 1396
Pace Project No.: 10373641

QC Batch: 452794 Analysis Method: NWTPH-Gx
QC Batch Method: NWTPH-Gx Analysis Description: NWTPH-Gx Water
Associated Lab Samples: 10373641002, 10373641003, 10373641008, 10373641012, 10373641013, 10373641014, 10373641015, 10373641017, 10373641018

METHOD BLANK: 2478416 Matrix: Water
Associated Lab Samples: 10373641002, 10373641003, 10373641008, 10373641012, 10373641013, 10373641014, 10373641015, 10373641017, 10373641018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	ug/L	ND	100	12/21/16 12:03	
a,a,a-Trifluorotoluene (S)	%.	83	50-150	12/21/16 12:03	

METHOD BLANK: 2478417 Matrix: Water
Associated Lab Samples: 10373641002, 10373641003, 10373641008, 10373641012, 10373641013, 10373641014, 10373641015, 10373641017, 10373641018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	ug/L	ND	100	12/21/16 19:56	
a,a,a-Trifluorotoluene (S)	%.	84	50-150	12/21/16 19:56	

LABORATORY CONTROL SAMPLE & LCSD: 2478418 2478419

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
TPH as Gas	ug/L	1000	1080	908	108	91	70-125	17	20	
a,a,a-Trifluorotoluene (S)	%.				96	95	50-150			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2478420 2478421

Parameter	Units	10372869002 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	552	1000	2000	1680	1820	112	64	46-149	8	30	
a,a,a-Trifluorotoluene (S)	%.						97	99	50-150			

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QUALITY CONTROL DATA

Project: AOC 1396
Pace Project No.: 10373641

QC Batch: 452967 Analysis Method: NWTPH-Gx
QC Batch Method: NWTPH-Gx Analysis Description: NWTPH-Gx Water
Associated Lab Samples: 10373641004, 10373641005, 10373641006, 10373641007, 10373641009, 10373641010, 10373641011, 10373641016, 10373641019, 10373641021

METHOD BLANK: 2479791 Matrix: Water
Associated Lab Samples: 10373641004, 10373641005, 10373641006, 10373641007, 10373641009, 10373641010, 10373641011, 10373641016, 10373641019, 10373641021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	ug/L	ND	100	12/22/16 11:36	
a,a,a-Trifluorotoluene (S)	%.	85	50-150	12/22/16 11:36	

METHOD BLANK: 2479792 Matrix: Water
Associated Lab Samples: 10373641004, 10373641005, 10373641006, 10373641007, 10373641009, 10373641010, 10373641011, 10373641016, 10373641019, 10373641021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	ug/L	ND	100	12/22/16 12:58	
a,a,a-Trifluorotoluene (S)	%.	85	50-150	12/22/16 12:58	

LABORATORY CONTROL SAMPLE & LCSD: 2479793 2479794

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
TPH as Gas	ug/L	1000	1040	989	104	99	70-125	5	20	
a,a,a-Trifluorotoluene (S)	%.				93	95	50-150			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2480000 2480001

Parameter	Units	10373641006 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	1000	1000	899	914	89	90	46-149	2	30	
a,a,a-Trifluorotoluene (S)	%.						93	94	50-150			

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QUALITY CONTROL DATA

Project: AOC 1396
Pace Project No.: 10373641

QC Batch: 453545 Analysis Method: NWTPH-Gx
QC Batch Method: NWTPH-Gx Analysis Description: NWTPH-Gx Water
Associated Lab Samples: 10373641020

METHOD BLANK: 2482686 Matrix: Water
Associated Lab Samples: 10373641020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	ug/L	ND	100	12/28/16 12:09	
a,a,a-Trifluorotoluene (S)	%.	91	50-150	12/28/16 12:09	

LABORATORY CONTROL SAMPLE & LCSD: 2482687 2482688

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
TPH as Gas	ug/L	1000	992	904	99	90	70-125	9	20	
a,a,a-Trifluorotoluene (S)	%.				92	95	50-150			

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QUALITY CONTROL DATA

Project: AOC 1396
Pace Project No.: 10373641

QC Batch: 452470 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV UST-WATER
Associated Lab Samples: 10373641001, 10373641002, 10373641008, 10373641012, 10373641013, 10373641014, 10373641015

METHOD BLANK: 2476861 Matrix: Water
Associated Lab Samples: 10373641001, 10373641002, 10373641008, 10373641012, 10373641013, 10373641014, 10373641015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	12/19/16 17:02	
Ethylbenzene	ug/L	ND	1.0	12/19/16 17:02	
Toluene	ug/L	ND	1.0	12/19/16 17:02	
Xylene (Total)	ug/L	ND	3.0	12/19/16 17:02	
1,2-Dichloroethane-d4 (S)	%.	115	75-125	12/19/16 17:02	
4-Bromofluorobenzene (S)	%.	102	75-125	12/19/16 17:02	
Toluene-d8 (S)	%.	100	75-125	12/19/16 17:02	

LABORATORY CONTROL SAMPLE: 2476862

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.1	95	75-125	
Ethylbenzene	ug/L	20	21.6	108	75-125	
Toluene	ug/L	20	20.9	104	75-125	
Xylene (Total)	ug/L	60	64.2	107	75-125	
1,2-Dichloroethane-d4 (S)	%.			112	75-125	
4-Bromofluorobenzene (S)	%.			101	75-125	
Toluene-d8 (S)	%.			105	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2476866 2476867

Parameter	Units	10373641002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	18.7	18.0	94	90	52-147	4	30	
Ethylbenzene	ug/L	ND	20	20	18.9	18.4	94	92	67-149	3	30	
Toluene	ug/L	ND	20	20	17.8	17.3	89	87	69-139	3	30	
Xylene (Total)	ug/L	ND	60	60	55.2	54.6	92	91	70-147	1	30	
1,2-Dichloroethane-d4 (S)	%.						121	120	75-125			
4-Bromofluorobenzene (S)	%.						98	99	75-125			
Toluene-d8 (S)	%.						103	103	75-125			

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QUALITY CONTROL DATA

Project: AOC 1396
Pace Project No.: 10373641

QC Batch: 452572 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV UST-WATER
Associated Lab Samples: 10373641003, 10373641017, 10373641018, 10373641019, 10373641020, 10373641021

METHOD BLANK: 2477310 Matrix: Water
Associated Lab Samples: 10373641003, 10373641017, 10373641018, 10373641019, 10373641020, 10373641021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	12/20/16 11:41	
Ethylbenzene	ug/L	ND	1.0	12/20/16 11:41	
Toluene	ug/L	ND	1.0	12/20/16 11:41	
Xylene (Total)	ug/L	ND	3.0	12/20/16 11:41	
1,2-Dichloroethane-d4 (S)	%.	103	75-125	12/20/16 11:41	
4-Bromofluorobenzene (S)	%.	106	75-125	12/20/16 11:41	
Toluene-d8 (S)	%.	97	75-125	12/20/16 11:41	

LABORATORY CONTROL SAMPLE & LCSD: 2477311 2477312

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Benzene	ug/L	20	21.1	19.9	105	99	75-125	6	20	
Ethylbenzene	ug/L	20	19.8	18.6	99	93	75-125	6	20	
Toluene	ug/L	20	20.1	19.1	100	95	75-125	5	20	
Xylene (Total)	ug/L	60	63.2	58.7	105	98	75-125	7	20	
1,2-Dichloroethane-d4 (S)	%.				98	100	75-125			
4-Bromofluorobenzene (S)	%.				105	105	75-125			
Toluene-d8 (S)	%.				100	101	75-125			

MATRIX SPIKE SAMPLE: 2477581

Parameter	Units	10373496001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	ND	20	18.9	95	52-147	
Ethylbenzene	ug/L	ND	20	18.0	90	67-149	
Toluene	ug/L	ND	20	18.4	92	69-139	
Xylene (Total)	ug/L	ND	60	57.4	96	70-147	
1,2-Dichloroethane-d4 (S)	%.				104	75-125	
4-Bromofluorobenzene (S)	%.				105	75-125	
Toluene-d8 (S)	%.				101	75-125	

SAMPLE DUPLICATE: 2477582

Parameter	Units	10373496002 Result	Dup Result	RPD	Max RPD	Qualifiers
Benzene	ug/L	12600	12700	1	30	
Ethylbenzene	ug/L	1420	1430	1	30	
Toluene	ug/L	519	518	0	30	
Xylene (Total)	ug/L	5160	5210	1	30	

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QUALITY CONTROL DATA

Project: AOC 1396
Pace Project No.: 10373641

SAMPLE DUPLICATE: 2477582

Parameter	Units	10373496002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dichloroethane-d4 (S)	%.	103	104	1		
4-Bromofluorobenzene (S)	%.	107	106	1		
Toluene-d8 (S)	%.	97	96	1		

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QUALITY CONTROL DATA

Project: AOC 1396
Pace Project No.: 10373641

QC Batch: 452611 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV UST-WATER
Associated Lab Samples: 10373641004, 10373641005, 10373641006, 10373641007, 10373641009, 10373641010, 10373641011, 10373641016

METHOD BLANK: 2477525 Matrix: Water
Associated Lab Samples: 10373641004, 10373641005, 10373641006, 10373641007, 10373641009, 10373641010, 10373641011, 10373641016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	12/20/16 21:29	
Ethylbenzene	ug/L	ND	1.0	12/20/16 21:29	
Toluene	ug/L	ND	1.0	12/20/16 21:29	
Xylene (Total)	ug/L	ND	3.0	12/20/16 21:29	
1,2-Dichloroethane-d4 (S)	%.	106	75-125	12/20/16 21:29	
4-Bromofluorobenzene (S)	%.	106	75-125	12/20/16 21:29	
Toluene-d8 (S)	%.	96	75-125	12/20/16 21:29	

LABORATORY CONTROL SAMPLE: 2477526

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.7	103	75-125	
Ethylbenzene	ug/L	20	19.8	99	75-125	
Toluene	ug/L	20	19.5	98	75-125	
Xylene (Total)	ug/L	60	62.0	103	75-125	
1,2-Dichloroethane-d4 (S)	%.			103	75-125	
4-Bromofluorobenzene (S)	%.			100	75-125	
Toluene-d8 (S)	%.			98	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2477542 2477543

Parameter	Units	10373641006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	20.6	18.8	103	94	52-147	9	30	
Ethylbenzene	ug/L	ND	20	20	19.4	17.8	97	89	67-149	9	30	
Toluene	ug/L	ND	20	20	19.0	17.6	95	88	69-139	8	30	
Xylene (Total)	ug/L	ND	60	60	61.2	55.8	102	93	70-147	9	30	
1,2-Dichloroethane-d4 (S)	%.						100	109	75-125			
4-Bromofluorobenzene (S)	%.						102	102	75-125			
Toluene-d8 (S)	%.						99	99	75-125			

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

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: AOC 1396
Pace Project No.: 10373641

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-M Pace Analytical Services - Minneapolis

BATCH QUALIFIERS

Batch: 452572

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AOC 1396
Pace Project No.: 10373641

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10373641002	**MW-41**	NWTPH-Gx	452794		
10373641003	**MW-50**	NWTPH-Gx	452794		
10373641004	**MW-54**	NWTPH-Gx	452967		
10373641005	**MW-209**	NWTPH-Gx	452967		
10373641006	**MW-210**	NWTPH-Gx	452967		
10373641007	**MW-211**	NWTPH-Gx	452967		
10373641008	**MW-212**	NWTPH-Gx	452794		
10373641009	**MW-213**	NWTPH-Gx	452967		
10373641010	**MW-214**	NWTPH-Gx	452967		
10373641011	**MW-215**	NWTPH-Gx	452967		
10373641012	**MW-216**	NWTPH-Gx	452794		
10373641013	**MW-217**	NWTPH-Gx	452794		
10373641014	**MW-218**	NWTPH-Gx	452794		
10373641015	**MW-219**	NWTPH-Gx	452794		
10373641016	**SMW-3**	NWTPH-Gx	452967		
10373641017	**MWR-1**	NWTPH-Gx	452794		
10373641018	**MWR-3**	NWTPH-Gx	452794		
10373641019	**MWR-4**	NWTPH-Gx	452967		
10373641020	**MWR-5**	NWTPH-Gx	453545		
10373641021	**MWR-6**	NWTPH-Gx	452967		
10373641001	**Trip Blank**	EPA 8260B	452470		
10373641002	**MW-41**	EPA 8260B	452470		
10373641003	**MW-50**	EPA 8260B	452572		
10373641004	**MW-54**	EPA 8260B	452611		
10373641005	**MW-209**	EPA 8260B	452611		
10373641006	**MW-210**	EPA 8260B	452611		
10373641007	**MW-211**	EPA 8260B	452611		
10373641008	**MW-212**	EPA 8260B	452470		
10373641009	**MW-213**	EPA 8260B	452611		
10373641010	**MW-214**	EPA 8260B	452611		
10373641011	**MW-215**	EPA 8260B	452611		
10373641012	**MW-216**	EPA 8260B	452470		
10373641013	**MW-217**	EPA 8260B	452470		
10373641014	**MW-218**	EPA 8260B	452470		
10373641015	**MW-219**	EPA 8260B	452470		
10373641016	**SMW-3**	EPA 8260B	452611		
10373641017	**MWR-1**	EPA 8260B	452572		
10373641018	**MWR-3**	EPA 8260B	452572		
10373641019	**MWR-4**	EPA 8260B	452572		
10373641020	**MWR-5**	EPA 8260B	452572		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AOC 1396
Pace Project No.: 10373641

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10373641021	**MWR-6**	EPA 8260B	452572		

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10373641

Page : 1 Of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	ATC Group Services LLC	Report To:	Cody Bishop	Attention:	Kyle Sattler
Address:	6347 Seaview Avenue NW	Copy To:		Company Name:	ATC Group Services LLC
	Seattle, WA 98107			Address:	6347 Seaview Avenue NW, Seattle, WA 98107
Email:	kyle.sattler@atcassociates.com	Purchase Order #:		Pace Quote:	
Phone:	503-407-9933 Fax:	Project Name:	AOC 1396	Pace Project Manager:	jennifer.gross@pacelabs.com,
Requested Due Date:	10 Day (Standard)	Project #:		Pace Profile #:	33332 / 1

Regulatory Agency

State / Location: WA - Westlake/ Mercer

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analyses Test: BTEX by 8260	NWTPH-GX	Residual Chlorine (Y/N)	
1	Trip Blank	OT							6				6									001
2	MW-41	WT		12/13/16	1310														X	X		002
3	~~MW-45~~ CB	WT																				
4	MW-50	WT		12/14	1510														X	X		003
5	MW-54	WT		12/15	1230																	004
6	MW-209	WT		12/15	1430																	005
7	MW-210	WT		12/15	1405																	006
8	MW-211	WT		12/15	1400																	007
9	MW-212	WT		12/13	1230																	008
10	MW-213	WT		12/15	820																	009
11	MW-214	WT		12/15	920																	010
12	MW-215	WT		12/15	1000																	011

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
		12/16/16	1300	PACE	12/16/16	1300	4.0	Y	W	Y
	PACE	12/16/16	1700		12-17-16	1050	2.3	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Cody Bishop

SIGNATURE of SAMPLER: DATE Signed: 12/16/16

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 2 Of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	ATC Group Services LLC	Report To:	Cody Bishop	Attention:	Kyle Sattler
Address:	6347 Seaview Avenue NW	Copy To:		Company Name:	ATC Group Services LLC
	Seattle, WA 98107			Address:	6347 Seaview Avenue NW, Seattle, WA 98107
Email:	kyle.sattler@atcassociates.com	Purchase Order #:		Pace Quote:	
Phone:	503-407-9933 Fax:	Project Name:	AOC 1396	Pace Project Manager:	jennifer.gross@pacelabs.com,
Requested Due Date:	10 Day (Standard)	Project #:		Pace Profile #:	33332 / 1

Regulatory Agency

State / Location: WA - Westlake/ Mercer

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test: Y/N	BTEX by 8260	NWTPH-GX	Residual Chlorine (Y/N)	
13	MW-216	WT		12/13	1040														X	X		012
14	MW-217	WT		12/13	1112																	013
15	MW-218	WT		12/13	1148																	014
16	MW-219	WT		12/13	1555																	015
17	SMW-3	WT		12/15	1500																	016
18	MWR-1	WT		12/14	1010																	017
19	~~MWR-2~~ CBS	WT		12/14																		
20	MWR-3	WT		12/14	1100																	018
21	MWR-4	WT		12/14	1130																	019
22	MWR-5	WT		12/14	1325																	020
23	MWR-6	WT		12/14	1435																	021
24																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
		12/16/14	1300	PACE	12/16/14	1300				
	PACE	12/16/14	1700		12-17-14	1050	2.3	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Cody Bishop

SIGNATURE of SAMPLER: DATE Signed: 12/16/14

Pace Analytical®	Document Name: **Sample Condition Upon Receipt Form**	Document Revised: 12Dec2016 Page 1 of 2
	Document No.: **F-MN-L-213-rev.19**	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: ATC Group

Project #: WO# : 10373641

10373641

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ SpeeDee ☐ Other:

Tracking Number: 7021 4575 5819

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No **Seals Intact?** ☐ Yes ☒ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other: **Temp Blank?** ☒ Yes ☐ No

Thermometer Used: ☒ 151401163 ☐ 151401164

Type of Ice: ☒ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temp Read (°C): 2.3 **Cooler Temp Corrected (°C):** 2.3 **Biological Tissue Frozen?** ☐ Yes ☐ No ☒ N/A

Temp should be above freezing to 6°C **Correction Factor:** +0.0 **Date and Initials of Person Examining Contents:** KAC 12-17-16

USDA Regulated Soil (☒ N/A, water sample)

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present?	☒ Yes	☐ No		1.
Chain of Custody Filled Out?	☒ Yes	☐ No		2.
Chain of Custody Relinquished?	☒ Yes	☐ No		3.
Sampler Name and/or Signature on COC?	☒ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☒ Yes	☐ No		5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No		6.
Rush Turn Around Time Requested?	☐ Yes	☒ No		7.
Sufficient Volume?	☒ Yes	☐ No		8.
Correct Containers Used?	☒ Yes	☐ No		9.
-Pace Containers Used?	☒ Yes	☐ No		
Containers Intact?	☒ Yes	☐ No		10.
Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☒ N/A	11. Note if sediment is visible in the dissolved container
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: WT	☐ Yes	☒ No		12. Crossed-out sample MW-45 did arrive. (Date/Time: 12-15-16 @ 12:30) MW-54 was not received.
All containers needing acid/base preservation have been checked? All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, NaOH >9 Sulfide, NaOH>12 Cyanide) Exceptions: VOA, coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin.	☐ Yes ☐ Yes ☒ Yes	☐ No ☐ No ☐ No	☒ N/A ☒ N/A ☐ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH Positive for Res. Chlorine? Y N Sample # Initial when completed: Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	☒ Yes	☐ No	☐ N/A	14. 1 Vial in Sample MW-45.
Trip Blank Present?	☒ Yes	☐ No	☐ N/A	15.
Trip Blank Custody Seals Present? Pace Trip Blank Lot # (if purchased): 111416-3BUF	☒ Yes	☐ No	☐ N/A	

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: Kyle Sattler / Cody Bishop Date/Time: 12/19/16

Comments/Resolution: Per Cody, sample MW-45 should be MW-54 collected on 12/15/16 @ 12:30. Per Kyle analyze Trip Blank for Benzene only.

Project Manager Review: JENNI GROSS **Date:** 12/19/16

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).

Pace Analytical	Document Name: Cooler Transfer Check List	Revised Date: 23Apr2013 Page 1 of 1
	Document Number: F-MN-C-120-rev.01	Issuing Authority: Pace Minnesota Quality Office

Cooler Transfer Check List

Client: ATC

Project Manager: Jenni Gross

Profile/Line #: 33332/1

Received with Custody Seal: Yes (No)

Custody Seal Intact: Yes No (NA)

	Temp Read	Corrected Temp	Correction Factor
Temperature C:	3.9	4.0	+0.1

IR Gun # (IR1 - Q281) IR2 - 122065284

☐ Samples on ice, cooling process has begun

Rush/Short Hold: NO

Containers Intact: (Yes) No

Re-packed and Re-iced: ✓

Temp Blank Included: (Yes) No

Shipped By/Date: NO 12/16/16

Notes:

Ship to: (Pace MN) Pace Davis

APPENDIX B

FIELD REPORT/GROUNDWATER GAUGING & SAMPLING LOGS

Field Report

FLD-100
Revision 1.0
6/1/2016

ATC Branch: Seattle, WA	Date: 12/13/16	Page of
ATC Representative(s):	Project: AOC 1396	
Role:	Location: 600 Westlake Avenue, Seattle, WA	
Contact Information: (206) 781-1449	Project No: Z076000073	Task No:
Scope of Work:	Weather: clear	Temperature:
___ Monitoring ___ Assessment ___ Remediation ___ Closure	Contractor: Altus / SPD	

Time:	Comments:
0900	Arrive on site. Direct SPD & Altus to Meeting location. Begin Safety tailgate meeting w/ contractors. Discuss today's tasks, safety hazards & site conditions. Perform site walk w/ Altus & SPD. Agreed on a plan of which MWs we would sample for most efficient use of resources & time.
	Altus began set up of traffic control equipment on Mercer St. SPD assisted w/ controlling traffic to help us get into position.
	ATC began sampling & monitoring on MW-216
	- Sampled & monitored MW-217
	- Sampled & monitored MW-218
	- Sampled & monitored MW-212
	- Sampled & monitored MW-41
1330	Broke for lunch
1430	Returned from lunch
	- Dumped purge water into carbon tanks in the remediation system.
	- Sampled & monitored MW-219
1600	- Packed up equipment, secure site. Depart site

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: 12/14/16	Page of
ATC Representative(s): L. Bishop	Project: AOC 1396	
Role:	Location: 600 Westlake Avenue, Seattle, WA	
Contact Information: (206) 781-1449	Project No: Z076000073	Task No:
Scope of Work:	Weather: Clear	Temperature:
___ Monitoring ___ Assessment ___ Remediation ___ Closure	Contractor: —	

Time:	Comments:
0800	Depart for site.
0830	Arrive on site. Perform site walk Decide best course of action & which MWs to begin on based on current conditions w/ traffic and parked cars.
	- Could not access SMW-3, MW-209, MW-210 due to not having the 1" size socket to open wal cap.
	- Sampled & monitored: MWR-1, MWR-3, MWR-4
1130	- Broke for lunch
1230	- Return from lunch
	- Sampled & monitored: MWR-5, MW-50, MWR-6
	- Could not access MW-45 due to 1" socket could not locate MWR-2 due to body covered in gravel. clean & secured site
1530	Depart for office
1430	load Metal detector & 1" socket set for use tomorrow

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: 12/15/16	Page of
ATC Representative(s): C. Bishop	Project: AOC 1396	
Role:	Location: 600 Westlake Avenue, Seattle, WA	
Contact Information: (206) 781-1449	Project No: Z076000073	Task No:
Scope of Work:	Weather:	Temperature:
___ Monitoring ___ Assessment ___ Remediation ___ Closure	Contractor:	

Time:	Comments:
0745	Arrive on site, Observe current site conditions to determine where to begin.
	Set up & Sample/monitor - MW-215
	↓
	- MW-214
	- MW-213
	- MW-45 - could not sample due to sludge in the well. Could not pull water. Possible well damage.
	- MW-2 - Could not locate. Used metal detector to attempt to locate MW. Never found it. moved on to remaining wells.
	- Set up & Sample/monitor - MW-54
	↓
	- MW-211
	- MW-210
	- MW-209
	- SMW-3
	- Break down equipment, secure ~~site~~ site, depart
1530	for office
1600	Complete paper work, Coordinate sample drop

Equipment Used:

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

Monitoring Well Purging and Sampling Log

FLD-103
Revision 1.0
Jul-08

ATC Branch: Seattle, WA	Date: 12/13/16	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-41		
	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

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

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

Purging Calculations

Casing Volumes (CV):

WC 4.45 x CM 1.6 = 0.71 (CV)(gal) x 3.0 CV (gal) = 0.48 PV

Monitoring Measurements

Depth to LNAPL (feet): —	Total Well Depth (feet): 19.7
Depth to Water (DTW)(feet): 15.25	Water Column (WC)(feet): 4.45
LNAPL Thickness (ft): —	Purging Start Time: 1250

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
1300	15.4	0.15	14.93	1044	clear	1.38	14.02	-137.5	
1303	15.6	0.35	15.29	982		0.77	14.05	-127.1	
1306	15.8	0.5	15.54	934		0.75	14.05	-114.0	
1309	16.0	0.75	15.52	899		0.62	14.06	-113.0	

Sample Data

Sample ID:	Time of Sample: 1310	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: 12/13/14	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-45	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

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

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

Purging Calculations

Casing Volumes (CV):

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

Monitoring Measurements

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

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
		Could Not Sample							

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: ____ Fast ____ Slow	% Recovery =

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

Comments:

Monitoring Well Purging and Sampling Log

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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-50	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

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

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

Purging Calculations

Casing Volumes (CV):

WC 8.7 x CM .16 = 1.39 (CV)(gal) x 3.0 CV (gal) = 4.17 PV

Monitoring Measurements

Depth to LNAPL (feet): —	Total Well Depth (feet): 19.4
Depth to Water (DTW)(feet): 10.7	Water Column (WC)(feet): 8.7
LNAPL Thickness (ft): —	Purging Start Time: 1450

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
1500	10.9	0.25	15.66	1131	clear	1.43	13.59	-124.0	
1503	11.2	0.35	15.65	1073		1.20	13.61	-125.3	
1506	11.3	0.45	15.76	1073		1.12	13.63	-126.0	
1509	11.5	0.7	15.61	1089		0.98	13.65	-131.6	

Sample Data

Sample ID:	Time of Sample: 1570	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

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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-54		
	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

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

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

Purging Calculations

Casing Volumes (CV):

WC 9.7 x CM .16 = 1.55 (CV)(gal) x 3.0 CV (gal) = 4.65 PV

Monitoring Measurements

Depth to LNAPL (feet): —	Total Well Depth (feet): 19.5
Depth to Water (DTW)(feet): 9.8	Water Column (WC)(feet): 9.7
LNAPL Thickness (ft): —	Purging Start Time: 1210

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
1218	10.2	0.35	14.75	395	clear	1.43	13.35	-100.1	
1223	10.25	0.45	14.69	392	|	1.59	13.29	-101.1	
1226	10.39	0.59	14.68	392	|	1.24	13.19	-102.1	
1229	10.5	0.75	14.69	391	|	1.27	13.15	-102.2	

Sample Data

Sample ID:	Time of Sample: 1230	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:

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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-209	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

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

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

Purging Calculations

Casing Volumes (CV):

WC 10.05 x CM .16 = 1.60 (CV)(gal) x 3.0 CV (gal) = 4.82 PV

Monitoring Measurements

Depth to LNAPL (feet): –	Total Well Depth (feet): 19.65
Depth to Water (DTW)(feet): 9.6	Water Column (WC)(feet): 10.05
LNAPL Thickness (ft): –	Purging Start Time: 1400

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
1420	10.1	.50	15.17	876	clear	0.77	13.62	-132.3	
1423	10.25	.65	15.17	864		0.77	13.63	-137.3	
1426	10.39	.78	15.19	856		0.74	13.66	-135.8	
1429	10.5	1.0	15.21	853		0.72	13.64	-135.9	

Sample Data

Sample ID:	Time of Sample: 1430	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:

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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-210		
	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

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

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

Purging Calculations

Casing Volumes (CV):

WC 10.3 x CM .16 = 1.64 (CV)(gal) x 3.0 CV (gal) = 4.94 PV

Monitoring Measurements

Depth to LNAPL (feet): —	Total Well Depth (feet): 19.2
Depth to Water (DTW)(feet): 8.9	Water Column (WC)(feet): 10.3
LNAPL Thickness (ft): —	Purging Start Time: 1345

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
1355	9.35	0.45	15.27	714	clear	0.88	13.58	-159.4	
1358	9.45	0.50	15.13	717	"	0.79	13.60	-160.2	
1401	9.60	0.75	15.08	718	"	0.70	13.60	-161.2	
1404	9.69	0.9	15.11	719	"	0.70	13.60	-161.4	

Sample Data

Sample ID:	Time of Sample: 1405	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:

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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-211		
	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

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

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

Purging Calculations

Casing Volumes (CV):

WC 11.2 x CM .16 = 1.71 (CV)(gal) x 3.0 CV (gal) = 5.37 PV

Monitoring Measurements

Depth to LNAPL (feet): —	Total Well Depth (feet): 20.0
Depth to Water (DTW)(feet): 8.8	Water Column (WC)(feet): 11.2
LNAPL Thickness (ft): —	Purging Start Time: 1320

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
1330	9.2	.45	14.90	933	Clear	2.08	13.46	-176.2	
1333	9.35	.55	14.96	933		1.47	13.48	-176.1	
1336	9.47	.69	14.83	937		1.20	13.50	-176.1	
1339	9.58	.75	14.78	952		1.19	13.51	-177.1	

Sample Data

Sample ID:	Time of Sample: 1400	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

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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-212		
	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 14.4 x CM .16 = 2.3 (CV)(gal) x 3.0 CV (gal) = 6.9 PV

Monitoring Measurements

Depth to LNAPL (feet): -	Total Well Depth (feet): 25.0
Depth to Water (DTW)(feet): 10.6	Water Column (WC)(feet): 14.4
LNAPL Thickness (ft): -	Purging Start Time: 1212

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
1222	10.9	0.15	16.38	1212	Clear	0.72	13.95	-175.6	
1225	11.2	0.3	16.57	1215	|	0.55	13.99	-183.2	
1228	11.5	0.5	16.91	1217	|	0.53	14.01	-187.5	
					|			

Sample Data

Sample ID:	Time of Sample: 1230	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:

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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

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

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

Purging Calculations

Casing Volumes (CV):

WC 11.2 x CM .16 = 1.79 (CV)(gal) x 3.0 CV (gal) = 5.37 PV

Monitoring Measurements

Depth to LNAPL (feet): —	Total Well Depth (feet): 20.20
Depth to Water (DTW)(feet): 9.0	Water Column (WC)(feet): 11.2
LNAPL Thickness (ft): —	Purging Start Time: 800

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
810	9.45	.45	15.19	817	clear	0.86	12.89	-12.5	
813	9.55	.55	15.06	788		0.82	13.08	-13.8	
816	9.71	.65	14.94	758		0.93	13.19	-15.9	
819	9.85	.90	14.91	750		0.81	13.31	-18.1	

Sample Data

Sample ID:	Time of Sample: 820	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

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ATC Branch: Seattle, WA	Date: 12/15/16	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-214		
	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 8.2 x CM .16 = 1.31 (CV)(gal) x 3.0 CV (gal) = 3.93 PV

Monitoring Measurements

Depth to LNAPL (feet): —	Total Well Depth (feet): 16.7
Depth to Water (DTW)(feet): 8.5	Water Column (WC)(feet): 8.2
LNAPL Thickness (ft): —	Purging Start Time: 900

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
910	8.9	0.25	14.51	534	clear	1.90	13.71	-1.7	
913	9.1	0.40	14.58	536		1.92	13.71	-1.1	
916	9.35	0.60	14.61	537		1.76	13.72	-0.3	
919	9.5	0.75	14.69	541		1.59	13.72	0.7	
920									

Sample Data

Sample ID:	Time of Sample: 920	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:

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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-215		
	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

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

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

Purging Calculations

Casing Volumes (CV):

WC 7.4 x CM .16 = 1.18 (CV)(gal) x 3.0 CV (gal) = 3.55 PV

Monitoring Measurements

Depth to LNAPL (feet): —	Total Well Depth (feet): 16.7
Depth to Water (DTW)(feet): 9.3	Water Column (WC)(feet): 7.4
LNAPL Thickness (ft): —	Purging Start Time: 940

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
950	9.35	0.45	14.88	999	clear	0.81	13.23	136.2	
953	9.40	0.50	14.21	1007		0.84	13.21	-124.1	
956	9.53	0.7	14.12	1006		1.17	13.23	-127.0	
959	9.70	0.9	14.00	1009		1.28	13.23	-131.0	

Sample Data

Sample ID:	Time of Sample: 1000	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:

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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:	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

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

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

Purging Calculations

Casing Volumes (CV):

WC 8.5 x CM .16 = 1.36 (CV)(gal) x 3.0 CV (gal) = 4.08 PV

Monitoring Measurements

Depth to LNAPL (feet): —	Total Well Depth (feet): 19.20
Depth to Water (DTW)(feet): 10.7	Water Column (WC)(feet): ~~10.7~~ 8.5
LNAPL Thickness (ft): —	Purging Start Time: 1020

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
1030	11.17	0.10	14.90	1558	Clear	2.46	13.89	109.3	
1033	11.3	0.15	15.53	1560	|	2.30	13.95	120.6	
1036	11.44	0.3	15.87	1555	|	2.10	14.01	125.6	
1039	11.5	0.5	15.79	1560	|	1.85	14.08	126.8	

Sample Data

Sample ID:	Time of Sample: 1040	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

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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:	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 13.25 x CM .16 = 2.12 (CV)(gal) x 3.0 CV (gal) = 6.36 PV

Monitoring Measurements

Depth to LNAPL (feet): —	Total Well Depth (feet): 24.6
Depth to Water (DTW)(feet): 11.35	Water Column (WC)(feet): 13.25
LNAPL Thickness (ft): —	Purging Start Time: 1055

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
1105	11.8	0.15	15.06	~~1469~~	clear	0.99	14.15	32.0	
1108	11.85	0.3	15.24	1476		0.95	14.15	32.0	
1111	11.9	0.4	15.41	1479		0.82	14.15	31.4	

Sample Data

Sample ID:	Time of Sample: 1112	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

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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-218		
	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 13.95 x CM .16 = 2.23 (CV)(gal) x 3.0 CV (gal) = 6.69 PV

Monitoring Measurements

Depth to LNAPL (feet): —	Total Well Depth (feet): 24.9
Depth to Water (DTW)(feet): 10.95	Water Column (WC)(feet): 13.95
LNAPL Thickness (ft): —	Purging Start Time: 1130

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
1140	11.3	0.15	15.28	1236	clear	0.91	14.01	-168.9	
1143	11.5	0.3	15.51	1231		0.86	14.04	-167.5	
1146	11.8	0.55	15.56	1231		0.74	14.02	-160.9	

Sample Data

Sample ID:	Time of Sample: 1148	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:

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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-219		
	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

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

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

Purging Calculations

Casing Volumes (CV):

WC 9.3 x CM .16 = 1.48 (CV)(gal) x 3.0 CV (gal) = 4.44 PV

Monitoring Measurements

Depth to LNAPL (feet): —	Total Well Depth (feet): 19.2
Depth to Water (DTW)(feet): 9.9	Water Column (WC)(feet): 9.3
LNAPL Thickness (ft): —	Purging Start Time: 1535

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
1545	10.2	0.15	13.97	1356	Clear	0.70	12.60	-130.2	
1548	10.4	0.3	14.22	1351	|	0.58	12.67	-146.9	
1551	10.6	0.5	14.38	1344	|	0.54	12.83	-151.2	
1554	10.75	0.7	14.42	1349	|	0.55	12.87	-156.2	

Sample Data

Sample ID:	Time of Sample: 1555	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:

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	Location: 600 Westlake Ave N, Seattle, WA	
Contact Information: 206-781-1449	Project No: Z076000073	Task No: 7601
Well ID: SMW-3		
	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

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

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

Purging Calculations

Casing Volumes (CV):

WC 6.9 x CM .16 = 1.10 (CV)(gal) x 3.0 CV (gal) = 3.31 PV

Monitoring Measurements

Depth to LNAPL (feet): —	Total Well Depth (feet): 17.10
Depth to Water (DTW)(feet): 10.2	Water Column (WC)(feet): 6.9
LNAPL Thickness (ft): —	Purging Start Time: 1440

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
1450	10.55	.45	14.80	641	Clear	1.09	13.69	-127.5	
1453	10.79	.60	14.79	628		1.12	13.69	-132.2	
1456	10.95	.75	14.84	625		1.13	13.68	-139.2	
1459	11.1	1.0	14.88	616		1.11	13.68	-143.3	

Sample Data

Sample ID:	Time of Sample: 1500	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:

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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: MWR-1	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

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

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

Purging Calculations

Casing Volumes (CV):

WC 7.15 x CM .16 = 1.14 (CV)(gal) x 3.0 CV (gal) = 3.43 PV

Monitoring Measurements

Depth to LNAPL (feet): —	Total Well Depth (feet): 17.5
Depth to Water (DTW)(feet): 10.35	Water Column (WC)(feet): 7.15
LNAPL Thickness (ft): —	Purging Start Time: 0950

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
1000	10.55	0.15	13.70	~~clear~~ 568	clear	1.53	13.61	7.9	
1003	10.7	0.5	13.95	569		1.06	13.67	19.6	
1006	10.9	0.7	13.71	569		1.03	13.73	8.6	
1009	10.9	1.0	13.73	568		1.03	13.77	9.0	

Sample Data

Sample ID:	Time of Sample: 1010	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:

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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: MWR-2		
	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):
Depth to Water (DTW)(feet):	Water Column (WC)(feet):
LNAPL Thickness (ft):	Purging Start Time:

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

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: _____ Fast _____ Slow	% Recovery =

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

Comments:

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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: MWR-3		
	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

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

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

Purging Calculations

Casing Volumes (CV):

WC 7.35 x CM .16 = 1.17 (CV)(gal) x 3.0 CV (gal) = 3.52 PV

Monitoring Measurements

Depth to LNAPL (feet): —	Total Well Depth (feet): 17.7
Depth to Water (DTW)(feet): 10.35	Water Column (WC)(feet): 7.35
LNAPL Thickness (ft): —	Purging Start Time: 1035

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
1045	10.75	0.5	14.32	510	clear	0.83	13.67	-162.5	
1049	10.9	0.65	13.90	520		1.05	13.62	-162.9	
1057	11.1	0.7	13.71	526		0.87	13.66	-163.0	
1059	11.2	0.85	13.57	521		1.17	13.68	-167.9	

Sample Data

Sample ID:	Time of Sample: 1110	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:

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	Location: 600 Westlake Ave N, Seattle, WA	
Contact Information: 206-781-1449	Project No: Z076000073	Task No: 7601
Well ID: MWR-4		
	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

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

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

Purging Calculations

Casing Volumes (CV):

WC 7 x CM .16 = 1.12 (CV)(gal) x 3.0 CV (gal) = 3.36 PV

Monitoring Measurements

Depth to LNAPL (feet): –	Total Well Depth (feet): 16.5
Depth to Water (DTW)(feet): 9.5	Water Column (WC)(feet): 7
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	10.0	0.5	13.06	609	Clear	1.46	13.66	-158.0	
1123	10.2	0.7	13.16	609	|	1.26	13.68	-161.2	
1126	10.25	0.8	13.23	609	|	1.03	13.68	-162.5	
1129	10.35	1.0	13.25	611	|	1.05	13.67	-163.7	

Sample Data

Sample ID:	Time of Sample: 1130	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:

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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: MW2-5		
	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

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

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

Purging Calculations

Casing Volumes (CV):

WC 7.8 x CM .16 = 1.24 (CV)(gal) x 3.0 CV (gal) = 3.74 PV

Monitoring Measurements

Depth to LNAPL (feet): —	Total Well Depth (feet): 16.25
Depth to Water (DTW)(feet): 8.45	Water Column (WC)(feet): 7.8
LNAPL Thickness (ft): —	Purging Start Time: 1305

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
1315	8.9	.25	12.84	419	clear	0.79	13.55	-125.2	
1318	9.1	.35	12.24	416		0.84	13.60	-128.6	
1321	9.2	.45	11.15	420		0.84	13.68	-124.1	
1324	9.25	.5	11.21	418		0.83	13.68	-121.6	

Sample Data

Sample ID:	Time of Sample: 1325	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:

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ATC Branch: Seattle, WA	Date: 12/14/16	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: MWR-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

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

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

Purging Calculations

Casing Volumes (CV):

WC 5.65 x CM .16 = 0.9 (CV)(gal) x 3.0 CV (gal) = 2.7 PV

Monitoring Measurements

Depth to LNAPL (feet): —	Total Well Depth (feet): 16.50
Depth to Water (DTW)(feet): 10.85	Water Column (WC)(feet): 5.65
LNAPL Thickness (ft): —	Purging Start Time: 1415

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
1425	10.95	.25	15.78	1172	clear	2.06	13.35	-102.3	
1428	11.1	.35	15.81	1197	↓	1.38	13.39	-104.2	
1431	11.35	.50	15.93	1201		1.17	13.43	-104.3	
1434									

Sample Data

Sample ID:	Time of Sample: 1435	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

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ATC Branch: Seattle, WA	Date: 12/13/16 - 12/14/16	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:
	Weather:	Temperature:
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-41	2"	1240	1243	—	15.25	—	19.7	
MW-45	2"	1030	1035	—	9.3	—	16.9	
MW-50	2"	1445	1444	—	10.7	—	19.4	
MW-54	2"	1200	1205	—	9.8	—	19.5	
MW-209	2"	1405	1406	—	9.6	—	19.65	
MW-210	2"	1335	1340	—	8.9	—	19.2	
MW-211	2"	1300	1305	—	8.8	—	20.3	
MW-212	2"	1209	1211	—	10.6	—	25	
MW-213	2"	755	758	—	9.0	—	20.20	
MW-214	2"	855	857	—	8.5	—	16.7	
MW-215	2"	930	935	—	9.3	—	16.7	
MW-216	2"	1012	1015	—	10.7	—	19.50	
MW-217	2"	1050	1052	—	~~9.55~~ 11.35	—	24.60	
MW-218	2"	1125	1126	—	10.95	—	24.9	
MW-219	2"	1500	1505	—	9.9	—	19.2	

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.

Monitor Well Gauging Log

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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:	Temperature:
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)
SMW-3	2"	1435	1437	—	10.2	—	~~17.10~~ 17.60	
MW2-1	2"	940	942	—	10.35	—	17.50	
MW2-2								
MW2-3	2"	1030	1032	—	10.35	—	17.7	
MW2-4	2"	1105	1106	—	9.5	—	16.5	
MW25	2"	1300	1302	—	8.4	—	16.25	
MW2-6	2"	1405	1407	—	10.85	—	16.50	

Comments:

Notes:

* If top of screen is submerged, allow at least 15 minutes for well equilibration following well cap removal.
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