ATC
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GROUNDWATER MONITORING REPORT
(Fourth Quarter 2015)

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

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

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

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

Cardno ATC Project No. Z076000073
February 17, 2016

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State of Washington
29940
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KYLE RAYMOND SATTLER

GROUNDWATER MONITORING REPORT
(Fourth Quarter 2015)
Phillips 66 Facility No. 255353 (AOC #1396)
600 Westlake Avenue North
Seattle, Washington

SITE INFORMATION:

Cardno ATC Contact Person:	Kyle Sattler
Date of previous sampling event:	9/10/15 through 9/13/15
Current remediation technique(s):	Soil Vapor Extraction/Air Sparge (Not active during monitoring and sampling event). On June 23 and September 11, 12 and 13, 2015, Dual Phase Extraction (DPE) conducted on wells MW-213, MW-17 and/or MW-218. Pre- and Post-DPE groundwater samples collected from the wells.
Ecology VCP Number:	NW1714

FIELD ACTIVITY:

Date(s) monitored and/or sampled:	12/07/15 and 12/08/15
Wells monitored:	Eighteen (MWR-1, MWR-3, MWR-4, MWR-6, MW-41, MW-45, MW-50, MW-54, MW-209, MW-210, MW-213 through MW-219 and SMW-3). Could not locate MWR-2. MWR-5 and MW-211 were submerged under surface water puddles, and a vehicle was parked over MW-212 making it inaccessible.
Wells sampled:	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]):	6.24 (MW-215)
Maximum depth to groundwater (feet below TOC):	15.88 (MW-41)
Average groundwater elevation (feet above mean sea level):	18.58
Change in average groundwater elevation since previous monitoring event (feet):	+1.12
Approximate groundwater gradient/flow direction:	0.04 / Northeast south of site; regionally to the north-northeast
Previous groundwater gradient/flow direction:	0.003 / Northeast beneath site; regionally to the north-northeast

GROUNDWATER CONDITIONS (12/07/15 and 12/08/15):

Minimum dissolved phase gasoline-range hydrocarbons concentration excluding "non-detects" (micrograms per liter [µg/L]):	180 (MW-218)
Maximum dissolved phase gasoline-range hydrocarbons concentration (µg/L):	748 (MW-45)
Maximum dissolved phase gasoline-range hydrocarbons concentration (µg/L) observed previous sampling event:	10,700 (MWR-5)
Minimum dissolved phase benzene concentration excluding "non-detects" (µg/L):	1.2 (MW-213)
Maximum dissolved phase benzene concentration (µg/L):	10.3 (MW-216)
Maximum dissolved phase benzene concentration (µg/L) observed previous sampling event:	35.0 (MWR-5)
Minimum dissolved phase ethylbenzene concentration excluding "non-detects" (µg/L):	3.0 (MW-217)
Maximum dissolved phase ethylbenzene concentration (µg/L):	20.3 (MW-45)
Maximum dissolved phase ethylbenzene concentration (µg/L) observed previous sampling event:	223 (MWR-5)
Minimum dissolved phase toluene concentration excluding "non-detects" (µg/L):	All wells were "non-detect"
Maximum dissolved phase toluene concentration (µg/L):	All wells were "non-detect"

Maximum dissolved phase toluene concentration (µg/L) observed previous sampling event:	1.1 (MWR-5)
Minimum dissolved phase total xylenes concentration excluding "non-detects" (µg/L):	3.4 (MW-45)
Maximum dissolved phase total xylenes concentration (µg/L):	3.4 (MW-45)
Maximum dissolved phase total xylenes concentration (µg/L) observed previous sampling event:	644 (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 benzene detected in the sample collected from MW-216. Wells MWR-2, MWR-5, MW-211 and MW-212 were inaccessible during this monitoring and sampling event, therefore, groundwater samples could not be collected from these wells.

Purge water generated during the December 2015 groundwater monitoring and sampling event was placed in the AS/SVE system holding tank, to be treated through the liquid carbon vessels prior to discharge to the City's sewer system.

As noted above and shown on Figure 1, the regional groundwater flow direction is toward the north-northeast, consistent with previous monitoring events. 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.

ATC is continuing to evaluate the recent quarterly groundwater monitoring and sampling data trends and results of the June and September HIT source removal events. Additional HIT source removal events may be implemented in the future at select wells if determined warranted. The next groundwater monitoring and sampling event is scheduled for the first semester of 2016.

ATTACHMENTS:

Table 1 Summary of Historical Groundwater Gauging and Laboratory Analytical Data
Figure 1 Groundwater Conditions Map (12/07/15)
Figure 2 Groundwater Analytical Map (12/07 and 08/15)

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

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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

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

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

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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
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
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																

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																
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
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
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
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
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
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
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

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Phillips 66 Site No. 255353 (AOC 1396)
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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														--	--	--
	03/17/08	Unable to locate														--	--	--

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

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)
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
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
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																
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
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.

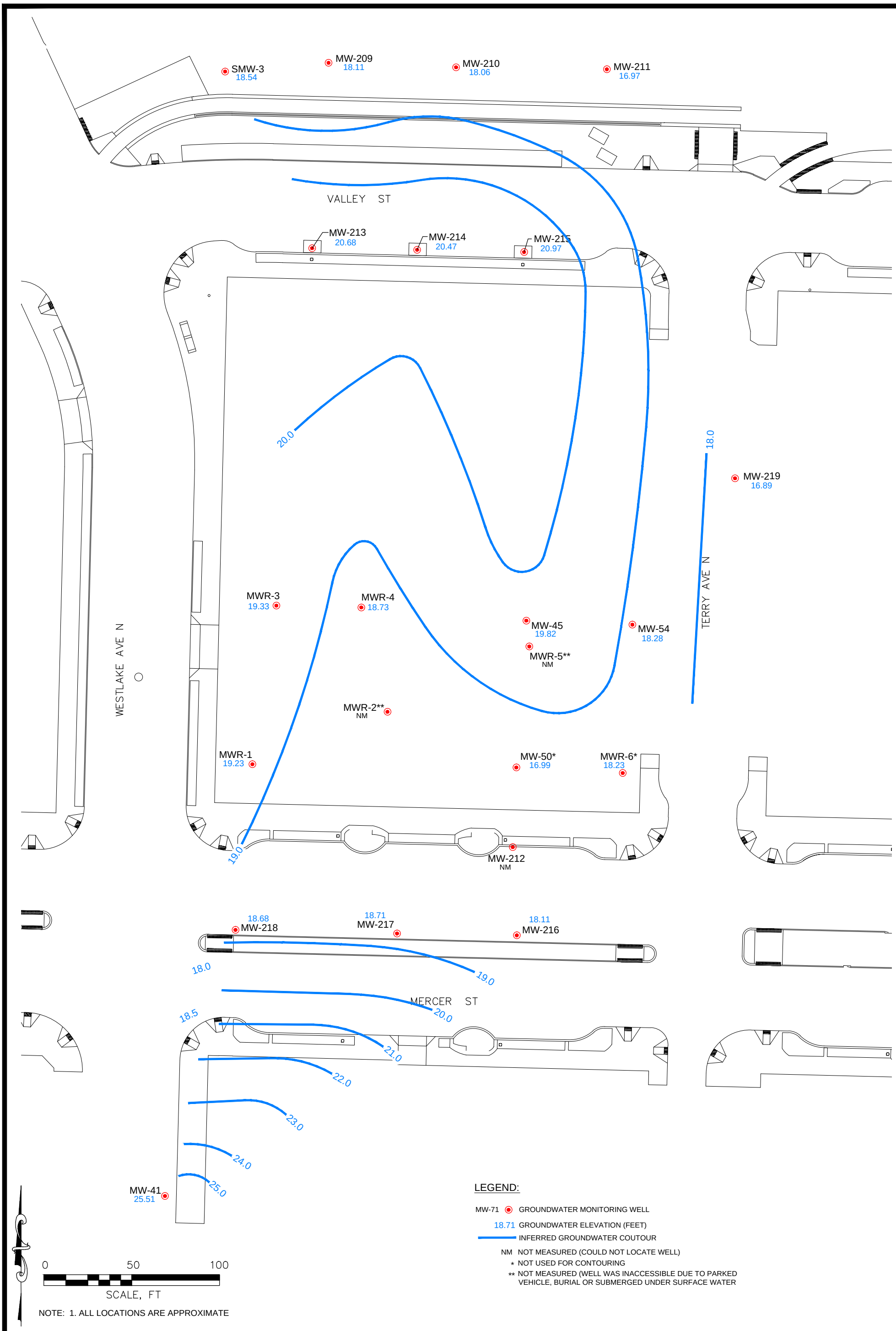
[ff] Sample collected immediately after High Intensity Targeted Extraction Event on September 12 , 2015.

[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



NOTE: 1. ALL LOCATIONS ARE APPROXIMATE

LEGEND:

- MW-71 — GROUNDWATER MONITORING WELL
- 18.71 — GROUNDWATER ELEVATION (FEET)
- INFERRED GROUNDWATER COUTOUR
- NM — NOT MEASURED (COULD NOT LOCATE WELL)
- * — NOT USED FOR CONTOURING
- ** — NOT MEASURED (WELL WAS INACCESSIBLE DUE TO PARKED VEHICLE, BURIAL OR SUBMERGED UNDER SURFACE WATER

GROUNDWATER CONDITIONS MAP (12/07/15 & 12/08/15)

PHILLIPS 66 FACILITY NO. 255353 (AOC 1396)

600 WESTLAKE AVENUE N

SEATTLE, WA

PROJECT NUMBER: Z076000073		DATE: 2/11/16	FIGURE 1
APPROVED BY: KS		DRAWN BY: BK	

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

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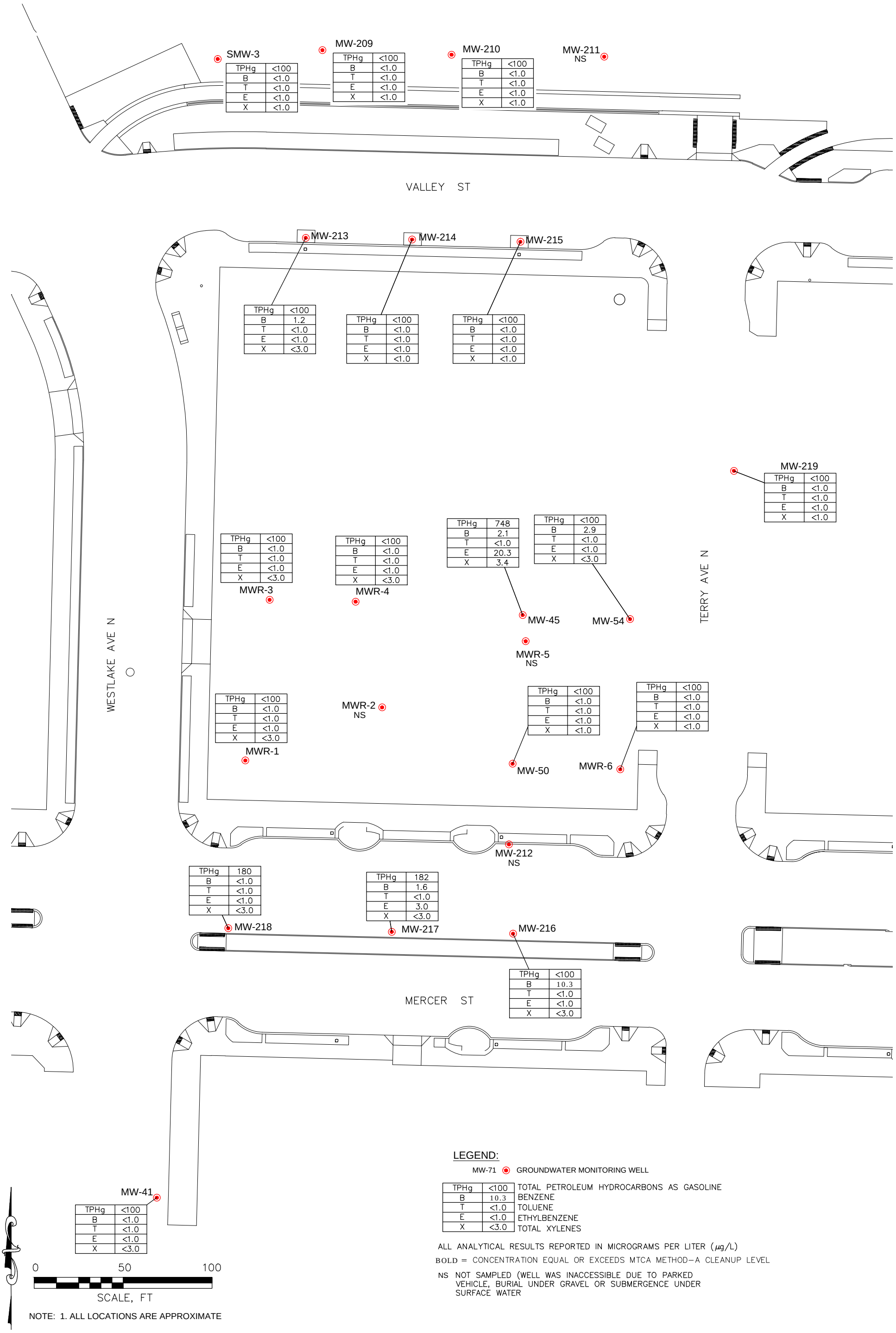

NOTE: 1. ALL LOCATIONS ARE APPROXIMATE

LEGEND:

MW-71 GROUNDWATER MONITORING WELL

TPHg	<100	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
B	10.3	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 (WELL WAS INACCESSIBLE DUE TO PARKED VEHICLE, BURIAL UNDER GRAVEL OR SUBMERGENCE UNDER SURFACE WATER

GROUNDWATER CONDITIONS MAP (12/07/15 & 12/08/15)

PHILLIPS 66 FACILITY NO. 255353 (AOC 1396)

600 WESTLAKE AVENUE N

SEATTLE, WA

PROJECT NUMBER: Z076000073		DATE: 2/16/16	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, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

December 16, 2015

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

RE: Project: AOC 1396-Seattle
Pace Project No.: 10332729

Dear Kyle Sattler:
Enclosed are the analytical results for sample(s) received by the laboratory on December 09, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Jennifer Gross
jennifer.gross@pacelabs.com
Project Manager

Enclosures

cc: Michael Miller, ATC Group Services LLC

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

CERTIFICATIONS

Project: AOC 1396-Seattle
Pace Project No.: 10332729

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
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
Washington Certification #: C486
West Virginia Certification #: 382
West Virginia DHHR #:9952C
Wisconsin Certification #: 999407970

Pace Analytical Services, Inc.
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(612)607-1700

SAMPLE SUMMARY

Project: AOC 1396-Seattle
Pace Project No.: 10332729

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10332729001	**MW-50**	Water	12/07/15 10:05	12/09/15 10:10
10332729002	**MW-R6**	Water	12/07/15 10:10	12/09/15 10:10
10332729003	**MW-45**	Water	12/07/15 10:50	12/09/15 10:10
10332729004	**MW-54**	Water	12/07/15 11:00	12/09/15 10:10
10332729005	**MWR-3**	Water	12/07/15 11:55	12/09/15 10:10
10332729006	**MWR-4**	Water	12/07/15 12:15	12/09/15 10:10
10332729007	**MWR-1**	Water	12/07/15 00:00	12/09/15 10:10
10332729008	**MWR-209**	Water	12/07/15 14:35	12/09/15 10:10
10332729009	**MWR-210**	Water	12/07/15 14:45	12/09/15 10:10
10332729010	**MW-41**	Water	12/08/15 10:30	12/09/15 10:10
10332729011	**SMW-3**	Water	12/07/15 15:25	12/09/15 10:10
10332729012	**MW-213**	Water	12/08/15 09:45	12/09/15 10:10
10332729013	**MW-214**	Water	12/08/15 10:45	12/09/15 10:10
10332729014	**MW-215**	Water	12/08/15 11:35	12/09/15 10:10
10332729015	**MW-216**	Water	12/08/15 11:30	12/09/15 10:10
10332729016	**MW-217**	Water	12/08/15 12:10	12/09/15 10:10
10332729017	**MW-218**	Water	12/08/15 12:50	12/09/15 10:10
10332729018	**MW-219**	Water	12/08/15 13:55	12/09/15 10:10
10332729019	**Trip Blank**	Water	12/07/15 07:00	12/09/15 10:10

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SAMPLE ANALYTE COUNT

Project: AOC 1396-Seattle
Pace Project No.: 10332729

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10332729001	MW-50	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	PRD	7	PASI-M
10332729002	MW-R6	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	PRD	7	PASI-M
10332729003	MW-45	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	PRD	7	PASI-M
10332729004	MW-54	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	PRD	7	PASI-M
10332729005	MWR-3	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	PRD	7	PASI-M
10332729006	MWR-4	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	PRD	7	PASI-M
10332729007	MWR-1	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	PRD	7	PASI-M
10332729008	MWR-209	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	PRD	7	PASI-M
10332729009	MWR-210	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	PRD	7	PASI-M
10332729010	MW-41	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	PRD	7	PASI-M
10332729011	SMW-3	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	PRD	7	PASI-M
10332729012	MW-213	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	PRD	7	PASI-M
10332729013	MW-214	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	PRD	7	PASI-M
10332729014	MW-215	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	PRD	7	PASI-M
10332729015	MW-216	NWTPH-Gx	EMC	2	PASI-M
		EPA 8260B	PRD	7	PASI-M
10332729016	MW-217	NWTPH-Gx	KMZ	2	PASI-M
		EPA 8260B	PRD	7	PASI-M
10332729017	MW-218	NWTPH-Gx	KMZ	2	PASI-M
		EPA 8260B	PRD	7	PASI-M
10332729018	MW-219	NWTPH-Gx	KMZ	2	PASI-M
		EPA 8260B	PRD	7	PASI-M
10332729019	Trip Blank	EPA 8260B	PRD	7	PASI-M

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

ANALYTICAL RESULTS

Project: AOC 1396-Seattle
Pace Project No.: 10332729

Sample: MW-50 **Lab ID: 10332729001** Collected: 12/07/15 10:05 Received: 12/09/15 10:10 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		12/10/15 20:27		
Surrogates								
a,a,a-Trifluorotoluene (S)	90	%.	50-150	1		12/10/15 20:27	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/14/15 20:34	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/14/15 20:34	100-41-4	
Toluene	ND	ug/L	1.0	1		12/14/15 20:34	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/14/15 20:34	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	96	%.	75-125	1		12/14/15 20:34	17060-07-0	
Toluene-d8 (S)	99	%.	75-125	1		12/14/15 20:34	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	75-125	1		12/14/15 20:34	460-00-4	

Sample: MW-R6 **Lab ID: 10332729002** Collected: 12/07/15 10:10 Received: 12/09/15 10:10 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		12/10/15 20:47		
Surrogates								
a,a,a-Trifluorotoluene (S)	88	%.	50-150	1		12/10/15 20:47	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	**1.9**	ug/L	1.0	1		12/14/15 20:51	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/14/15 20:51	100-41-4	
Toluene	ND	ug/L	1.0	1		12/14/15 20:51	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/14/15 20:51	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	91	%.	75-125	1		12/14/15 20:51	17060-07-0	
Toluene-d8 (S)	97	%.	75-125	1		12/14/15 20:51	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125	1		12/14/15 20:51	460-00-4	

Sample: MW-45 **Lab ID: 10332729003** Collected: 12/07/15 10:50 Received: 12/09/15 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	**748**	ug/L	100	1		12/10/15 16:45		
Surrogates								
a,a,a-Trifluorotoluene (S)	90	%.	50-150	1		12/10/15 16:45	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	**2.1**	ug/L	1.0	1		12/14/15 21:07	71-43-2	
Ethylbenzene	**20.3**	ug/L	1.0	1		12/14/15 21:07	100-41-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AOC 1396-Seattle
Pace Project No.: 10332729

Sample: MW-45 **Lab ID: 10332729003** Collected: 12/07/15 10:50 Received: 12/09/15 10:10 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		12/14/15 21:07	108-88-3	
Xylene (Total)	**3.4**	ug/L	3.0	1		12/14/15 21:07	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	93	%.	75-125	1		12/14/15 21:07	17060-07-0	
Toluene-d8 (S)	98	%.	75-125	1		12/14/15 21:07	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	75-125	1		12/14/15 21:07	460-00-4	

Sample: MW-54 **Lab ID: 10332729004** Collected: 12/07/15 11:00 Received: 12/09/15 10:10 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		12/10/15 21:07		
Surrogates								
a,a,a-Trifluorotoluene (S)	91	%.	50-150	1		12/10/15 21:07	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	**2.9**	ug/L	1.0	1		12/14/15 21:24	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/14/15 21:24	100-41-4	
Toluene	ND	ug/L	1.0	1		12/14/15 21:24	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/14/15 21:24	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	93	%.	75-125	1		12/14/15 21:24	17060-07-0	
Toluene-d8 (S)	97	%.	75-125	1		12/14/15 21:24	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	75-125	1		12/14/15 21:24	460-00-4	

Sample: MWR-3 **Lab ID: 10332729005** Collected: 12/07/15 11:55 Received: 12/09/15 10:10 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		12/10/15 21:27		
Surrogates								
a,a,a-Trifluorotoluene (S)	88	%.	50-150	1		12/10/15 21:27	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/14/15 21:40	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/14/15 21:40	100-41-4	
Toluene	ND	ug/L	1.0	1		12/14/15 21:40	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/14/15 21:40	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	95	%.	75-125	1		12/14/15 21:40	17060-07-0	
Toluene-d8 (S)	99	%.	75-125	1		12/14/15 21:40	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125	1		12/14/15 21:40	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AOC 1396-Seattle
Pace Project No.: 10332729

Sample: MWR-4 **Lab ID: 10332729006** Collected: 12/07/15 12:15 Received: 12/09/15 10:10 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		12/10/15 21:47		
Surrogates								
a,a,a-Trifluorotoluene (S)	85	%.	50-150	1		12/10/15 21:47	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/15/15 02:01	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/15/15 02:01	100-41-4	
Toluene	ND	ug/L	1.0	1		12/15/15 02:01	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/15/15 02:01	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%.	75-125	1		12/15/15 02:01	17060-07-0	
Toluene-d8 (S)	98	%.	75-125	1		12/15/15 02:01	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	75-125	1		12/15/15 02:01	460-00-4	

Sample: MWR-1 **Lab ID: 10332729007** Collected: 12/07/15 00:00 Received: 12/09/15 10:10 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		12/10/15 22:07		
Surrogates								
a,a,a-Trifluorotoluene (S)	88	%.	50-150	1		12/10/15 22:07	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/15/15 02:18	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/15/15 02:18	100-41-4	
Toluene	ND	ug/L	1.0	1		12/15/15 02:18	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/15/15 02:18	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	96	%.	75-125	1		12/15/15 02:18	17060-07-0	
Toluene-d8 (S)	99	%.	75-125	1		12/15/15 02:18	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125	1		12/15/15 02:18	460-00-4	

Sample: MWR-209 **Lab ID: 10332729008** Collected: 12/07/15 14:35 Received: 12/09/15 10:10 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		12/10/15 22:27		
Surrogates								
a,a,a-Trifluorotoluene (S)	86	%.	50-150	1		12/10/15 22:27	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/15/15 04:29	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/15/15 04:29	100-41-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AOC 1396-Seattle
Pace Project No.: 10332729

Sample: MWR-209 **Lab ID: 10332729008** Collected: 12/07/15 14:35 Received: 12/09/15 10:10 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		12/15/15 04:29	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/15/15 04:29	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	93	%.	75-125	1		12/15/15 04:29	17060-07-0	
Toluene-d8 (S)	98	%.	75-125	1		12/15/15 04:29	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	75-125	1		12/15/15 04:29	460-00-4	

Sample: MWR-210 **Lab ID: 10332729009** Collected: 12/07/15 14:45 Received: 12/09/15 10:10 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		12/10/15 22:47		
Surrogates								
a,a,a-Trifluorotoluene (S)	91	%.	50-150	1		12/10/15 22:47	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/15/15 04:45	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/15/15 04:45	100-41-4	
Toluene	ND	ug/L	1.0	1		12/15/15 04:45	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/15/15 04:45	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	94	%.	75-125	1		12/15/15 04:45	17060-07-0	
Toluene-d8 (S)	100	%.	75-125	1		12/15/15 04:45	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	75-125	1		12/15/15 04:45	460-00-4	

Sample: MW-41 **Lab ID: 10332729010** Collected: 12/08/15 10:30 Received: 12/09/15 10:10 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		12/10/15 23:07		
Surrogates								
a,a,a-Trifluorotoluene (S)	89	%.	50-150	1		12/10/15 23:07	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/15/15 02:34	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/15/15 02:34	100-41-4	
Toluene	ND	ug/L	1.0	1		12/15/15 02:34	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/15/15 02:34	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	96	%.	75-125	1		12/15/15 02:34	17060-07-0	
Toluene-d8 (S)	98	%.	75-125	1		12/15/15 02:34	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	75-125	1		12/15/15 02:34	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AOC 1396-Seattle
Pace Project No.: 10332729

Sample: SMW-3 **Lab ID: 10332729011** Collected: 12/07/15 15:25 Received: 12/09/15 10:10 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		12/10/15 23:27		
Surrogates								
a,a,a-Trifluorotoluene (S)	89	%.	50-150	1		12/10/15 23:27	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/15/15 02:50	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/15/15 02:50	100-41-4	
Toluene	ND	ug/L	1.0	1		12/15/15 02:50	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/15/15 02:50	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	95	%.	75-125	1		12/15/15 02:50	17060-07-0	
Toluene-d8 (S)	97	%.	75-125	1		12/15/15 02:50	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125	1		12/15/15 02:50	460-00-4	

Sample: MW-213 **Lab ID: 10332729012** Collected: 12/08/15 09:45 Received: 12/09/15 10:10 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		12/10/15 17:05		
Surrogates								
a,a,a-Trifluorotoluene (S)	96	%.	50-150	1		12/10/15 17:05	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	**1.2**	ug/L	1.0	1		12/15/15 03:07	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/15/15 03:07	100-41-4	
Toluene	ND	ug/L	1.0	1		12/15/15 03:07	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/15/15 03:07	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	94	%.	75-125	1		12/15/15 03:07	17060-07-0	
Toluene-d8 (S)	96	%.	75-125	1		12/15/15 03:07	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125	1		12/15/15 03:07	460-00-4	

Sample: MW-214 **Lab ID: 10332729013** Collected: 12/08/15 10:45 Received: 12/09/15 10:10 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		12/10/15 23:47		
Surrogates								
a,a,a-Trifluorotoluene (S)	90	%.	50-150	1		12/10/15 23:47	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/15/15 03:23	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/15/15 03:23	100-41-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AOC 1396-Seattle
Pace Project No.: 10332729

Sample: MW-214 **Lab ID: 10332729013** Collected: 12/08/15 10:45 Received: 12/09/15 10:10 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		12/15/15 03:23	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/15/15 03:23	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	94	%.	75-125	1		12/15/15 03:23	17060-07-0	
Toluene-d8 (S)	98	%.	75-125	1		12/15/15 03:23	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	75-125	1		12/15/15 03:23	460-00-4	

Sample: MW-215 **Lab ID: 10332729014** Collected: 12/08/15 11:35 Received: 12/09/15 10:10 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		12/11/15 00:07		
Surrogates								
a,a,a-Trifluorotoluene (S)	88	%.	50-150	1		12/11/15 00:07	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/15/15 00:23	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/15/15 00:23	100-41-4	
Toluene	ND	ug/L	1.0	1		12/15/15 00:23	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/15/15 00:23	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	93	%.	75-125	1		12/15/15 00:23	17060-07-0	
Toluene-d8 (S)	99	%.	75-125	1		12/15/15 00:23	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	75-125	1		12/15/15 00:23	460-00-4	

Sample: MW-216 **Lab ID: 10332729015** Collected: 12/08/15 11:30 Received: 12/09/15 10:10 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		12/11/15 00:27		
Surrogates								
a,a,a-Trifluorotoluene (S)	91	%.	50-150	1		12/11/15 00:27	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	**10.3**	ug/L	1.0	1		12/15/15 01:29	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/15/15 01:29	100-41-4	
Toluene	ND	ug/L	1.0	1		12/15/15 01:29	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/15/15 01:29	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	96	%.	75-125	1		12/15/15 01:29	17060-07-0	
Toluene-d8 (S)	98	%.	75-125	1		12/15/15 01:29	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	75-125	1		12/15/15 01:29	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AOC 1396-Seattle
Pace Project No.: 10332729

Sample: MW-217 **Lab ID: 10332729016** Collected: 12/08/15 12:10 Received: 12/09/15 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	**182**	ug/L	100	1		12/14/15 18:44		
Surrogates								
a,a,a-Trifluorotoluene (S)	98	%.	50-150	1		12/14/15 18:44	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	**1.6**	ug/L	1.0	1		12/15/15 03:40	71-43-2	
Ethylbenzene	**3.0**	ug/L	1.0	1		12/15/15 03:40	100-41-4	
Toluene	ND	ug/L	1.0	1		12/15/15 03:40	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/15/15 03:40	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	96	%.	75-125	1		12/15/15 03:40	17060-07-0	
Toluene-d8 (S)	98	%.	75-125	1		12/15/15 03:40	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	75-125	1		12/15/15 03:40	460-00-4	

Sample: MW-218 **Lab ID: 10332729017** Collected: 12/08/15 12:50 Received: 12/09/15 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
TPH as Gas	**180**	ug/L	100	1		12/14/15 19:05		
Surrogates								
a,a,a-Trifluorotoluene (S)	97	%.	50-150	1		12/14/15 19:05	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/15/15 03:56	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/15/15 03:56	100-41-4	
Toluene	ND	ug/L	1.0	1		12/15/15 03:56	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/15/15 03:56	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%.	75-125	1		12/15/15 03:56	17060-07-0	
Toluene-d8 (S)	98	%.	75-125	1		12/15/15 03:56	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125	1		12/15/15 03:56	460-00-4	

Sample: MW-219 **Lab ID: 10332729018** Collected: 12/08/15 13:55 Received: 12/09/15 10:10 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		12/14/15 19:27		
Surrogates								
a,a,a-Trifluorotoluene (S)	96	%.	50-150	1		12/14/15 19:27	98-08-8	
8260B MSV UST	Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	1		12/15/15 04:12	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/15/15 04:12	100-41-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: AOC 1396-Seattle
Pace Project No.: 10332729

Sample: MW-219 **Lab ID: 10332729018** Collected: 12/08/15 13:55 Received: 12/09/15 10:10 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		12/15/15 04:12	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/15/15 04:12	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%.	75-125	1		12/15/15 04:12	17060-07-0	
Toluene-d8 (S)	98	%.	75-125	1		12/15/15 04:12	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	75-125	1		12/15/15 04:12	460-00-4	

Sample: Trip Blank **Lab ID: 10332729019** Collected: 12/07/15 07:00 Received: 12/09/15 10:10 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		12/14/15 23:50	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/14/15 23:50	100-41-4	
Toluene	ND	ug/L	1.0	1		12/14/15 23:50	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/14/15 23:50	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	93	%.	75-125	1		12/14/15 23:50	17060-07-0	
Toluene-d8 (S)	98	%.	75-125	1		12/14/15 23:50	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	75-125	1		12/14/15 23:50	460-00-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: AOC 1396-Seattle
Pace Project No.: 10332729

QC Batch: GCV/14750 Analysis Method: NWTPH-Gx
QC Batch Method: NWTPH-Gx Analysis Description: NWTPH-Gx Water
Associated Lab Samples: 10332729001, 10332729002, 10332729003, 10332729004, 10332729005, 10332729006, 10332729007, 10332729008, 10332729009, 10332729010, 10332729011, 10332729012, 10332729013, 10332729014, 10332729015

METHOD BLANK: 2154572 Matrix: Water
Associated Lab Samples: 10332729001, 10332729002, 10332729003, 10332729004, 10332729005, 10332729006, 10332729007, 10332729008, 10332729009, 10332729010, 10332729011, 10332729012, 10332729013, 10332729014, 10332729015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	ug/L	ND	100	12/10/15 16:05	
a,a,a-Trifluorotoluene (S)	%.	90	50-150	12/10/15 16:05	

METHOD BLANK: 2154573 Matrix: Water
Associated Lab Samples: 10332729001, 10332729002, 10332729003, 10332729004, 10332729005, 10332729006, 10332729007, 10332729008, 10332729009, 10332729010, 10332729011, 10332729012, 10332729013, 10332729014, 10332729015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	ug/L	ND	100	12/10/15 16:25	
a,a,a-Trifluorotoluene (S)	%.	92	50-150	12/10/15 16:25	

LABORATORY CONTROL SAMPLE & LCSD: 2154574 2154575

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
TPH as Gas	ug/L	1000	1020	874	102	87	65-125	16	20	
a,a,a-Trifluorotoluene (S)	%.				100	100	50-150			

MATRIX SPIKE SAMPLE: 2154582

Parameter	Units	10331966001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
TPH as Gas	ug/L	30.9J	1000	1040	101	50-150	
a,a,a-Trifluorotoluene (S)	%.				106	50-150	

SAMPLE DUPLICATE: 2154583

Parameter	Units	10331966002 Result	Dup Result	RPD	Max RPD	Qualifiers
TPH as Gas	ug/L	21.0J	ND		30	
a,a,a-Trifluorotoluene (S)	%.	93	90	3		

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, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: AOC 1396-Seattle
Pace Project No.: 10332729

QC Batch: GCV/14753 Analysis Method: NWTPH-Gx
QC Batch Method: NWTPH-Gx Analysis Description: NWTPH-Gx Water
Associated Lab Samples: 10332729016, 10332729017, 10332729018

METHOD BLANK: 2155225 Matrix: Water
Associated Lab Samples: 10332729016, 10332729017, 10332729018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	ug/L	ND	100	12/14/15 12:04	
a,a,a-Trifluorotoluene (S)	%.	98	50-150	12/14/15 12:04	

METHOD BLANK: 2155226 Matrix: Water
Associated Lab Samples: 10332729016, 10332729017, 10332729018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	ug/L	ND	100	12/14/15 12:26	
a,a,a-Trifluorotoluene (S)	%.	89	50-150	12/14/15 12:26	

LABORATORY CONTROL SAMPLE & LCSD: 2155227 2155228

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
TPH as Gas	ug/L	1000	1150	961	115	96	65-125	18	20	
a,a,a-Trifluorotoluene (S)	%.				114	95	50-150			

MATRIX SPIKE SAMPLE: 2155242

Parameter	Units	10332222005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
TPH as Gas	ug/L	ND	1000	1040	104	50-150	
a,a,a-Trifluorotoluene (S)	%.				110	50-150	

SAMPLE DUPLICATE: 2155243

Parameter	Units	10332222006 Result	Dup Result	RPD	Max RPD	Qualifiers
TPH as Gas	ug/L	ND	ND		30	
a,a,a-Trifluorotoluene (S)	%.	95	96	1		

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: AOC 1396-Seattle
Pace Project No.: 10332729

QC Batch: MSV/34092 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV UST-WATER
Associated Lab Samples: 10332729001, 10332729002, 10332729003, 10332729004, 10332729005

METHOD BLANK: 2156931 Matrix: Water
Associated Lab Samples: 10332729001, 10332729002, 10332729003, 10332729004, 10332729005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	12/14/15 15:07	
Ethylbenzene	ug/L	ND	1.0	12/14/15 15:07	
Toluene	ug/L	ND	1.0	12/14/15 15:07	
Xylene (Total)	ug/L	ND	3.0	12/14/15 15:07	
1,2-Dichloroethane-d4 (S)	%.	91	75-125	12/14/15 15:07	
4-Bromofluorobenzene (S)	%.	99	75-125	12/14/15 15:07	
Toluene-d8 (S)	%.	97	75-125	12/14/15 15:07	

LABORATORY CONTROL SAMPLE: 2156933

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	17.5	88	71-125	
Ethylbenzene	ug/L	20	18.9	95	75-125	
Toluene	ug/L	20	17.9	89	74-125	
Xylene (Total)	ug/L	60	56.0	93	75-125	
1,2-Dichloroethane-d4 (S)	%.			92	75-125	
4-Bromofluorobenzene (S)	%.			100	75-125	
Toluene-d8 (S)	%.			99	75-125	

MATRIX SPIKE SAMPLE: 2157776

Parameter	Units	10332834015 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	ND	20	18.9	94	53-139	
Ethylbenzene	ug/L	ND	20	20.6	103	55-139	
Toluene	ug/L	ND	20	19.8	99	52-148	
Xylene (Total)	ug/L	ND	60	61.8	103	54-144	
1,2-Dichloroethane-d4 (S)	%.				95	75-125	
4-Bromofluorobenzene (S)	%.				99	75-125	
Toluene-d8 (S)	%.				100	75-125	

SAMPLE DUPLICATE: 2157777

Parameter	Units	10332834016 Result	Dup Result	RPD	Max RPD	Qualifiers
Benzene	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: AOC 1396-Seattle
Pace Project No.: 10332729

SAMPLE DUPLICATE: 2157777

Parameter	Units	10332834016 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dichloroethane-d4 (S)	%.	92	94	3		
4-Bromofluorobenzene (S)	%.	100	99	2		
Toluene-d8 (S)	%.	97	97	1		

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: AOC 1396-Seattle
Pace Project No.: 10332729

QC Batch: MSV/34093 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV UST-WATER
Associated Lab Samples: 10332729006, 10332729007, 10332729008, 10332729009, 10332729010, 10332729011, 10332729012, 10332729013, 10332729014, 10332729015, 10332729016, 10332729017, 10332729018, 10332729019

METHOD BLANK: 2156945 Matrix: Water
Associated Lab Samples: 10332729006, 10332729007, 10332729008, 10332729009, 10332729010, 10332729011, 10332729012, 10332729013, 10332729014, 10332729015, 10332729016, 10332729017, 10332729018, 10332729019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	12/14/15 23:34	
Ethylbenzene	ug/L	ND	1.0	12/14/15 23:34	
Toluene	ug/L	ND	1.0	12/14/15 23:34	
Xylene (Total)	ug/L	ND	3.0	12/14/15 23:34	
1,2-Dichloroethane-d4 (S)	%.	98	75-125	12/14/15 23:34	
4-Bromofluorobenzene (S)	%.	100	75-125	12/14/15 23:34	
Toluene-d8 (S)	%.	98	75-125	12/14/15 23:34	

LABORATORY CONTROL SAMPLE: 2156946

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.0	90	71-125	
Ethylbenzene	ug/L	20	19.2	96	75-125	
Toluene	ug/L	20	18.2	91	74-125	
Xylene (Total)	ug/L	60	58.1	97	75-125	
1,2-Dichloroethane-d4 (S)	%.			96	75-125	
4-Bromofluorobenzene (S)	%.			99	75-125	
Toluene-d8 (S)	%.			100	75-125	

MATRIX SPIKE SAMPLE: 2157401

Parameter	Units	10332729014 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	ND	20	19.7	97	53-139	
Ethylbenzene	ug/L	ND	20	20.4	102	55-139	
Toluene	ug/L	ND	20	19.5	97	52-148	
Xylene (Total)	ug/L	ND	60	61.4	102	54-144	
1,2-Dichloroethane-d4 (S)	%.				96	75-125	
4-Bromofluorobenzene (S)	%.				100	75-125	
Toluene-d8 (S)	%.				98	75-125	

SAMPLE DUPLICATE: 2157402

Parameter	Units	10332729015 Result	Dup Result	RPD	Max RPD	Qualifiers
Benzene	ug/L	10.3	10.3	1	30	
Ethylbenzene	ug/L	ND	ND		30	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: AOC 1396-Seattle
Pace Project No.: 10332729

SAMPLE DUPLICATE: 2157402

Parameter	Units	10332729015 Result	Dup Result	RPD	Max RPD	Qualifiers
Toluene	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%.	96	94	1		
4-Bromofluorobenzene (S)	%.	99	100	1		
Toluene-d8 (S)	%.	98	98	0		

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REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: AOC 1396-Seattle
Pace Project No.: 10332729

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

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AOC 1396-Seattle
Pace Project No.: 10332729

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10332729001	**MW-50**	NWTPH-Gx	GCV/14750		
10332729002	**MW-R6**	NWTPH-Gx	GCV/14750		
10332729003	**MW-45**	NWTPH-Gx	GCV/14750		
10332729004	**MW-54**	NWTPH-Gx	GCV/14750		
10332729005	**MWR-3**	NWTPH-Gx	GCV/14750		
10332729006	**MWR-4**	NWTPH-Gx	GCV/14750		
10332729007	**MWR-1**	NWTPH-Gx	GCV/14750		
10332729008	**MWR-209**	NWTPH-Gx	GCV/14750		
10332729009	**MWR-210**	NWTPH-Gx	GCV/14750		
10332729010	**MW-41**	NWTPH-Gx	GCV/14750		
10332729011	**SMW-3**	NWTPH-Gx	GCV/14750		
10332729012	**MW-213**	NWTPH-Gx	GCV/14750		
10332729013	**MW-214**	NWTPH-Gx	GCV/14750		
10332729014	**MW-215**	NWTPH-Gx	GCV/14750		
10332729015	**MW-216**	NWTPH-Gx	GCV/14750		
10332729016	**MW-217**	NWTPH-Gx	GCV/14753		
10332729017	**MW-218**	NWTPH-Gx	GCV/14753		
10332729018	**MW-219**	NWTPH-Gx	GCV/14753		
10332729001	**MW-50**	EPA 8260B	MSV/34092		
10332729002	**MW-R6**	EPA 8260B	MSV/34092		
10332729003	**MW-45**	EPA 8260B	MSV/34092		
10332729004	**MW-54**	EPA 8260B	MSV/34092		
10332729005	**MWR-3**	EPA 8260B	MSV/34092		
10332729006	**MWR-4**	EPA 8260B	MSV/34093		
10332729007	**MWR-1**	EPA 8260B	MSV/34093		
10332729008	**MWR-209**	EPA 8260B	MSV/34093		
10332729009	**MWR-210**	EPA 8260B	MSV/34093		
10332729010	**MW-41**	EPA 8260B	MSV/34093		
10332729011	**SMW-3**	EPA 8260B	MSV/34093		
10332729012	**MW-213**	EPA 8260B	MSV/34093		
10332729013	**MW-214**	EPA 8260B	MSV/34093		
10332729014	**MW-215**	EPA 8260B	MSV/34093		
10332729015	**MW-216**	EPA 8260B	MSV/34093		
10332729016	**MW-217**	EPA 8260B	MSV/34093		
10332729017	**MW-218**	EPA 8260B	MSV/34093		
10332729018	**MW-219**	EPA 8260B	MSV/34093		
10332729019	**Trip Blank**	EPA 8260B	MSV/34093		

PaceAnalytical

CHAIN-OF-CUSTODY / Analytical Request Document

L0332729

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

Page : Of

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Phillips66_Cardno ATC Associates WA	Report To:	Kyle Sattler	Attention:	Accounts Payable
Address:	6347 Seaview Ave. NW	Copy To:	Mark.Newman@cardno.com	Company Name:	Phillips 66
	Seattle, WA 98107			Address:	
Email:	Kyle.Sattler@cardno.com	Purchase Order #:	4526806842	Pace Quote:	
Phone:	(206)781-1449 Fax:	Project Name:	AOC 1396 - Seattle	Pace Project Manager:	jennifer.gross@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	33332 / 1

Regulatory Agency: WA

ITEM #	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	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: NWTPH-Gx	Analyses Test: 8260 BTEX	Residual Chlorine (Y/N)	
1	MW-50	WT	G			12/9/15	1005											X	X	001
2	MW-R6						1010													002
3	MW-45						1050													003
4	MW-54						1100													004
5	MWR-3						1155													005
6	MWR-4						1215													006
7	MWR-1																			007
8	MW-209						1435													008
9	MW-210						1445													009
10	MW-41			12/8/15	1030															010
11	SMW-3			12/7/15	1525															011
12	MW-213	WT	G	12/9/15	945															012

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)
		12/8/15	1600		12/9/15	1600	2.4	Y	N	Y
	Jenni Gross/Pace	12/5/15	16:30	Pace	12/9/15	0830	1.4	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark Newman

SIGNATURE of SAMPLER: DATE Signed: 12/4/15

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : Of

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Phillips66_Cardno ATC Associates WA	Report To:	Kyle Sattler	Attention:	Accounts Payable
Address:	6347 Seaview Ave. NW	Copy To:	Mark.Newman@cardno.com	Company Name:	Phillips 66
	Seattle, WA 98107			Address:	
Email:	Kyle.Sattler@cardno.com	Purchase Order #:		Pace Quote:	
Phone:	(206)781-1449 Fax:	Project Name:	AOC 1396 - Seattle	Pace Project Manager:	jennifer.gross@pacelabs.com
Requested Due Date:		Project #:		Pace Profile #:	33332 / 1

Regulatory Agency: WA

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	Analysis Test Y/N	NWTPH-Gx	8260 BTEX	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-214	DW	G			12/8/15	1045												X	X		013
2	MW-215						1135															014
3	MW-216						1130															015
4	MW-217						1210															016
5	MW-218						1250															017
6	MW-219						1355															018
7	Trip Blank					12/7/15	7:00															019
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Mark ATC	12/8/15	16:30				2.9
	Jenni Gross / Pace	12/8/15	16:30	Pace	12/9/15	10:10	4.4

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Mark Newman					
SIGNATURE of SAMPLER:		DATE Signed: 12/8/15				

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: P66 - 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:	2.9	2.9	0

IR Gun # IR1 (IR2)

☐ 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: QC 12/8/15

Notes:

Pace Analytical	Document Name: Sample Condition Upon Receipt Form	Document Revised: 23Feb2015 Page 1 of 1
	Document No.: F-MN-L-213-rev.13	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: Phillips66 - Cardno ATC Assoc.

Project #: WO#: 10332729

10332729

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

Tracking Number: 6451 0864 7261

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: ☐B88A9130516413 ☐B88A912167504 ☒B88A0143310098 Type of Ice: ☒Wet ☐Blue ☐None ☐Samples on ice, cooling process has begun

Cooler Temp Read (°C): 1.0 Cooler Temp Corrected (°C): 1.4 Biological Tissue Frozen? ☐Yes ☐No ☒N/A

Temp should be above freezing to 6°C Correction Factor: +0.4 Date and Initials of Person Examining Contents: BM 12/9/15

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

Did samples originate in a quarantine zone within the United States: AL, AR, AZ, CA, FL, GA, ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or WA (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	☐N/A	1.
Chain of Custody Filled Out?	☒Yes	☐No	☐N/A	2.
Chain of Custody Relinquished?	☒Yes	☐No	☐N/A	3.
Sampler Name and/or Signature on COC?	☒Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time?	☒Yes	☐No	☐N/A	5.
Short Hold Time Analysis (<72 hr)?	☐Yes	☒No	☐N/A	6.
Rush Turn Around Time Requested?	☐Yes	☒No	☐N/A	7.
Sufficient Volume?	☒Yes	☐No	☐N/A	8.
Correct Containers Used?	☒Yes	☐No	☐N/A	9.
-Pace Containers Used?	☒Yes	☐No	☐N/A	
Containers Intact?	☒Yes	☐No	☐N/A	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?	☒Yes	☐No	☐N/A	12.
-Includes Date/Time/ID/Analysis Matrix: WT				
All containers needing acid/base preservation have been checked?	☐Yes	☐No	☒N/A	13. ☐HNO_3 ☐H_2SO_4 ☐NaOH ☐HCl Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl<2; NaOH >9 Sulfide, NaOH>12 Cyanide)	☐Yes	☐No	☒N/A	
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC	☒Yes	☐No	☐N/A	Initial when completed:_____ Lot # of added preservative:_____
Headspace in VOA Vials (>6mm)?	☐Yes	☒No	☐N/A	14.
Trip Blank Present?	☒Yes	☐No	☐N/A	15.
Trip Blank Custody Seals Present?	☒Yes	☐No	☐N/A	
Pace Trip Blank Lot # (if purchased): 092915-3B2A				

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

Person Contacted: Kyle Sattler Date/Time: 12/10/15 11:56 email

Comments/Resolution: Analyze Trip Blank for BTEX only. 06 12/10/15

Project Manager Review: [signature] Date: 12/10/15

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: Sample Container Count	Document Revised: 30Jul2014 Page 1 of 1
	Document No.: F-MN-C-090-Rev.04	Issuing Authority: Pace Minnesota Quality Office

1316

Client: Pleb-ATC Project #: 10332729 COC ID: — COC Page: 1/2 of 2/2

Sample Line Item	BP1U	BP2U	BP3U	BP3S	BP3N	AG1U	AG1H	AG3S	AG1T	JGFU	JGCU	BJFU	WPDU	VG9M	VG9H	GN	SP5T	DWC
☐	Check the box to the left to indicate that the container(s) received for line items - are identical to the container(s) documented for line item 1 for this CoC.																	
1-18															6			
19															6TB			
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

Comments:

Container Codes:

AG1H	1 L amber glass HCL	BP1N	1 L plastic HNO3	DG9C	40 mL vial with ascorbic acid	VG9B	40 mL clear VOA vial Na Bisulfate
AG1S	1 L amber glass H2SO4	BP1S	1 L plastic H2SO4	DG9T	40 mL amber VOA vial Na Thio	VG9H	40 mL clear VOA vial HCl
AG1T	1 L amber glass Na Thiosulfate	BP1U	1 L plastic unpreserved	DG9U	40 mL amber VOA vial	VG9M	40 mL clear VOA vial MeOH
AG1U	1 L amber glass unpreserved	BP1Z	1 L plastic NaOH, Zn Ac	DWC	Dry weight container	VG9S	40 mL clear VOA vial H2SO4
AG2H	500 mL amber glass HCl	BP2A	500 mL plastic NaOH	E2H	25 g Encore	VG9T	40 mL clear VOA vial Na Thiosulfate
AG2N	500 mL amber glass HNO3	BP2N	500 mL plastic HNO3	GJ	1 Gallon jug	VG9U	40 mL clear VOA vial
AG2S	500 mL amber glass H2SO4	BP2S	500 mL plastic H2SO4	GN	General unpreserved	VG9W	40 mL clear VOA vial DI Water/stir bar
AG2U	500 mL amber unpreserved	BP2U	500 mL plastic unpreserved	GNN	General preserved with Nitric Acid	VSO	Headspace septa vial and HCl
AG3H	250 mL amber glass HCl	BP2Z	500 mL NaOH, Zn Ac	GNS	General with H_2SO_4	WGFX	4 oz wide jar and wipe Hexane
AG3S	250 mL amber glass H2SO4	BP3A	250 mL plastic NaOH, Asc Acid	JGCU	8 oz clear wide jar	WPDU	16 oz clear wide mouth jar
AG3U	250 mL amber glass unpreserved	BP3N	250 mL plastic HNO3	JGFM	4 oz amber wide jar MeOH	XAD	XAD trap
AG4S	120 mL amber glass H2SO4	BP3S	250 mL plastic H2SO4	JGFU	4 oz wide jar		
AG4U	125 mL amber glass unpreserved	BP3U	250 mL plastic unpreserved	PB	Clear zip-lock bag		
BJFM	4 oz clear jar MeOH	BP3Z	250 mL plastic NaOH, Zn Ac	PUF	Polyurethane Foam		
BJFU	4 oz amber tared weight	BP4N	125 mL plastic HNO3	SP5T	120 mL Coliform NA Thiosulfate		
BJTM	2 oz clear MeOH	BP4U	125 mL plastic unpreserved	T	Tedlar Bag		
BJTU	2 oz clear wide jar	C	Air Cassettes	TDT	Thermal desorption tube		
BP1A	1 L plastic NaOH	DG9H	40 mL amber VOA vial HCl	U	Summa Can		

APPENDIX B

FIELD REPORT/GROUNDWATER GAUGING & SAMPLING LOGS

Cardno ATC
Shaping the Future

Field Report

FLD-100
Revision 0.0
Jan-13

ATC Branch: Seattle	Date: 12/7/15	Page / of
ATC Representative(s): Mark Newman.	Project: Phillips 66 AOC #1396	
Role:	Location: Westlake and Mercer Ave. Seattle, WA	
Contact Information: 206-781-1449	Project No: 76.751181396	Task No:
Scope of Work:	Weather:	Temperature:
___ Monitoring ___ Assessment ___ Remediation ___ Closure	Contractor:	

Time:	Comments:
8:30	ATC representatives Mark Newman and Simon Payne arrive at Project Site in Seattle, Wa. Conduct Health and Safety Meeting. Calibrate 2-YSIs, begin setting up sampling equipment.
	Walk to Store to buy Ice and Batteries for YSI.
9:40	Begin purging MWB-6.
10:10	Collect MWB-6.
10:30	Set up on MW-54, Begin purging
11:00	Collect MW-54. SP samples MW-45.
11:15	Call PM Kyle Sattler to discuss system totalizer readings. Current reading = 82346 gal.
11:50	Begin purging MWB-4.
12:15	gauge wells along Valley St. MW-211 is submerged under 36-inches of water.
1330	Mob truck to South Lake Union. Begin sampling wells along valley St. with SP.
16:45	Finish sampling. Mob back to Site. Dispose of purge water through remediation system.
17:15	Depart site for office.

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

Cardno ATC
Shaping the Future

Field Report

FLD-100
Revision 0.0
Jul-08

Cardno ATC Branch: Seattle	Date: 12/07/15	Page 1 of 1
Cardno ATC Representative(s): S. Payne	Project: P66	
Role: Geologist	Location: Westlake at Mercer	
Contact Information: 206-781-1449	Project No:	Task No:
Scope of Work: ✓ Monitoring ___ Assessment ___ Remediation ___ Closure	Weather: Rain	Temperature: ~50°F
	Contractor: ✓	

Time:	Comments:
08:30	Arrive on site; put on Level D PPE; conduct tailgate safety meeting; discuss scope of work and appropriate JSAs; discuss working in rainy conditions; calibrate water quality meter to 7 pH. Set up monitoring/sampling equipment
09:30	Gauge DTW, purge, sample gw from the following on-site ~~M~~ SP wells MW-50, MW-45, MWR-3, MWR-1; mob off property
14:00	Gauge DTW, purge, sample gw from off-property wells MW-209, MW-210, MW-211; turbidity is clear; exclusion zone set up at each well
16:45	mob back to P66 property; stow equipment
17:15	leave site

Equipment Used: Peristaltic pump; wtr Qtly meter; wtr level meter; truck

Contractor Hours (per Person): ✓	Staff / Technician Hours: 8.75 on site / Mileage:
Copies To:	Project Manager: KS
	Reviewed By:

Cardno ATC
Shaping the Future

Field Report

FLD-100
Revision 0.0
Jan-13

ATC Branch: Seattle	Date: 12/8/15	Page / of
ATC Representative(s): Mark Newman	Project: Phillips 66 AOC #1396	
Role:	Location: Westlake and Mercer Ave. Seattle, WA	
Contact Information: 206-781-1449	Project No: 76.751181396	Task No:
Scope of Work:	Weather:	Temperature:
___ Monitoring ___ Assessment ___ Remediation ___ Closure	Contractor:	

Time:	Comments:
8:00	Cardno ATC representatives Mark Newman and Simon Payne,
	arrive at Project Site in Seattle, WA.
8:10	Altus Traffic, Inc (Altus) arrives at site. Conduct Health
	and Safety meeting and "on-boarding" watch Stakeholder
	interation and P66 Safety Video.
9:00	King County Sheriff, Uniformed Police Officers (UPOs)
	arrive at site. Altus begins setting up on MW-41.
9:45	Mob truck in Westlake Ave.
10:00	Begin purging MW-41.
10:30	Collect Sample.
10:45	Begin setting up traffic control in Mercer St.
11:00	mob to MW-216. Sample wells 216-218 in mercer St
13:00	Finish work in Mercer, UPO's depart Site.
13:20	Set up on MW 219.
14:00	Finish sampling, Altus departs Site.
14:30	Decon and clean up sampling equipment. Empty
	purge water into system.
15:00	Depart site for office

Equipment Used:

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

Cardno ATC
Shaping the Future

Field Report

FLD-100
Revision 0.0
Jul-08

Cardno ATC Branch: Seattle	Date: 12/08/15	Page 1 of
Cardno ATC Representative(s): S. Payne	Project: P66 1396	
Role: Geologist	Location: 600 WLake, Seattle	
Contact Information: 206-781-1449	Project No:	Task No:
Scope of Work:	Weather: Rain/windy	Temperature: 55°F
✓ Monitoring ___ Assessment ___ Remediation ___ Closure	Contractor: ✓	

Time:	Comments:
08:25	Arrive on site; level D PPE; conduct tailgate Safety meeting; discuss JSA appropriate to Scope of work; discuss working in stormy weather; M. Newman onboards traffic control vendor to P66 expectations
09:00	Mob to MW-213; measure DTW; purge; Sample gw; exclusion zone set up; turbidity is clear
10:15	Set up exclusion zones at MW-214, 215; Meaure DTW, purge, sample wells; turbidity is clear
12:00	Mob to P66 property; assess access to MWR-5; Submerged; no Sample; MW-212 had Vehicle parked over it - no sample; pack up equipment
12:45	leave site

Equipment Used: truck, Peristaltic pump; Water qtly meter; water level meter

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

ATC GROUP SERVICES LLC

Monitor Well Gauging Log

FLD-102
Revision 0.0
Jul-08

ATC Branch: Seattle, WA | Date: 12/7/15 | Page of

ATC Representative(s): Mark Merman

Project: **Phillips 66 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)
MWR-1	2"				10.58	~~10.58~~	17.50	
MWR-2	2"				Buried under Const. Equip and gravel			
MWR-3	2"				10.39		17.10	
MWR-4	2"				10.07		16.20	
MWR-5	2"				submerged under rain water			
MWR-6	2"				10.89		16.50	
MW-41	2"				15.88		19.50	
MW-45	2"				8.09		19.50	
MW-50	2"				12.01		19.35	
MW-54	2"				9.60		19.20	
MW-209	2"				8.77		19.50	
MW-210	2"				8.50		19.20	
MW-211	2"				submerged under		Stormwater	
MW-212	2"				Car parked over well, could not access			
MW-213	2"				6.67		20.20	
MW-214	2"				6.86		17.20	
MW-215	2"				6.24		17.20	
MW-216	2"				11.57		25.20	
MW-217	2"				11.37		24.60	
MW-218	2"				10.94		24.90	
MW-219	2"				9.78		19.80	
SMW-3	2"				8.78		14.05	

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.

Cardno ATC
Shaping the Future

Monitoring Well Purging and Sampling Log

FLD-103
Revision 1.0
Jul-08

ATC Branch: Seattle, WA	Date: 12/7/15	Page of
ATC Representative(s): Mark Newman	Project: Phillips 66 AOC ~~#2061~~ 1396	
	Location: ~~2415 Griffin Ave, Enumclaw, WA~~ WL/M	
Contact Information: 206-781-1449	Project No: ~~Z07600007~~	Task No: 7601
Well ID: MWB-6	Weather: Rainy	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 _X_ Peristaltic Pump Other: ____

3 Well Volumes _X_ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) 12.00

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer _X_ 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): 16.50
Depth to Water (DTW)(feet): 10.89	Water Column (WC)(feet): 5.61
LNAPL Thickness (ft): —	Purging Start Time: 9:40

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
10:00	10.91	0.20	12.68	1483	Clear	0.84	6.78	-73.5	
10:03	10.91	0.23	12.67	1480	"	0.82	6.79	-74.5	
10:06	10.91	0.26	12.65	1486	"	0.80	6.81	-75.5	
10:09	10.92	0.29	12.64	1479	"	0.79	6.82	-76.8	

Sample Data

Sample ID: MWB-6	Time of Sample: 10:10	Filtered (yes/no)	Preservative	Analytical Parameters
Container Types, Volumes, & Quantities:				
3- VOAs		N	HCl	Gx, BTEX, ~~Dx~~
~~2- 250ml PE~~		~~Y/N~~	~~HNO3/none~~	~~Total and Dissolved Pb~~

Well Recovery Data

Maximum Drawdown (DTW*m*)(feet): 10.92	Approximate Flow Rate (GPM): 0.01
Recovery Type: Y Fast ____ Slow	% Recovery = 100

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

Comments:

Cardno ATC
Shaping the Future

Monitoring Well Purging and Sampling Log

FLD-103
Revision 1.0
Jul-08

ATC Branch: Seattle, WA #76

Date: 12/7/15

Page of

ATC Representative(s): Mark Newman

Project: Phillips 66 - ~~2061~~ 1396

Location: ~~2415 Griffin Avenue, Enumclaw, WA~~ WA/M

Contact Information: 206-781-1449

Project No: ~~76.75418.2061~~

Task No:

MW-~~3~~ 54

Contractor:

Weather: Rainy

Temperature:

Purging & Sampling Instrumentation & Method

Water Level Meter (Model/ID): Envirotech Water Level Meter

Interface Probe (Model/ID): ~~Solinst~~ —

Water Quality Meter (Model/ID): YSI 556

Decontamination Method: Alconox

Purging Method: ____ PVC Bailer ____ Vacuum Truck ____ Submersible Pump ____ Peristaltic Pump Other: ____

3 Well Volumes ____ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) 11.00

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): 19.20

Depth to Water (DTW)(feet): 9.60

Water Column (WC)(feet): 9.60

LNAPL Thickness (ft): —

Purging Start Time: 10:35

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
10:50	9.62	0.15	9.83	796	clear	1.51	6.99	-100.6	
10:53	9.63	0.18	9.81	796	"	1.48	7.00	-99.5	
10:56	9.64	0.21	9.80	793	"	1.47	7.01	-99.3	
10:59	9.64	0.24	9.79	792	"	1.45	7.01	-99.1	

Sample Data

Sample ID: MW-54

Time of Sample: 11:00

Container Types, Volumes, & Quantities:	Filtered (yes/no)	Preservatives	Analytical Parameters
6 - 40ml VOAs	N	HCl	6x, BTEX

Well Recovery Data

Maximum Drawdown (DTW*m*)(feet): 9.64

Approximate Flow Rate (GPM): 0.01

Recovery Type: (Fast) ____ Slow

% Recovery = 100

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

Comments:

Cardno ATC
Shaping the Future

Monitoring Well Purging and Sampling Log

FLD-103
Revision 1.0
Jul-08

ATC Branch: Seattle, WA | Date: 12/7/15 | Page of

ATC Representative(s): Mark Newman | Project: Phillips 66 AOC #~~2067~~ 1396

Location: ~~2415 Griffin Ave, Enumclaw, WA~~ WL/M

Contact Information: 206-781-1449 | Project No: Z07600007 3 | Task No: 7601

Well ID: MWB-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 X Peristaltic Pump Other: ____

3 Well Volumes __X__ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) 11.50

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer X 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): ~~10.07~~ | Total Well Depth (feet): 16.20

Depth to Water (DTW)(feet): 10.07 | Water Column (WC)(feet): 6.13

LNAPL Thickness (ft): | Purging Start Time: 11:50

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
12:05	10.09	0.15	11.38	676	Clear	0.84	7.14	-120.0	
12:08	10.10	0.18	11.42	676	"	0.83	7.14	-118.8	
12:11	10.11	0.21	11.38	676	"	0.83	7.14	-118.4	
12:14	10.12	0.24	11.36	675	"	0.83	7.14	-118.2	

Sample Data

Sample ID: MWB-4 | Time of Sample: 12:15

Container Types, Volumes, & Quantities:	Filtered (yes/no)	Preservative	Analytical Parameters
	N	HCl	Gx, BTEX, Dx
2 - 250ml PE	Y/N	HNO3/none	Total and Dissolved Pb

Well Recovery Data

Maximum Drawdown (DTW*m*)(feet): 10.12 | Approximate Flow Rate (GPM): 0.01

Recovery Type: Fast ____ Slow | % Recovery = 100

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

Comments:

Cardno ATC
Shaping the Future

Monitoring Well Purging and Sampling Log

FLD-103
Revision 1.0
Jul-08

ATC Branch: Seattle, WA
Date: 12/7/15
Page of

ATC Representative(s): Mark Newman
Project: Phillips 66 AOC ~~#2061~~ 1396
Location: ~~2415 Griffin Ave, Enumclaw, WA~~ WL/M
Contact Information: 206-781-1449
Project No: Z07600003
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 X Peristaltic Pump Other: ____
3 Well Volumes X Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) 10.00
Sampling Method: ____ Teflon Bailer ____ Disposable Bailer X 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): —
Depth to Water (DTW)(feet): 8.50
LNAPL Thickness (ft): —
Total Well Depth (feet): 19.20
Water Column (WC)(feet): 10.70
Purging Start Time: 14:20

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
14:35	8.52	0.15	10.38	688	clear	1.14	7.10	-118.7	
14:38	8.53	0.18	10.31	688	"	1.09	7.09	-118.7	
14:41	8.53	0.21	10.30	685	"	1.06	7.08	-117.8	
14:43	8.54	0.24	10.28	688	"	1.04	7.08	-117.3	

Sample Data

Sample ID: MW-210
Time of Sample: 1443

Container Types, Volumes, & Quantities:	Filtered (yes/no)	Preservative	Analytical Parameters
6-40ml VOAs	N	HCl	Gx, BTEX, Dx
2 - 250ml PE	Y/N	HNO3/none	Total and Dissolved Pb

Well Recovery Data

Maximum Drawdown (DTWm)(feet): 8.54
Approximate Flow Rate (GPM): 0.01
Recovery Type: X Fast ____ Slow
% Recovery = 100

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

Comments:

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Monitoring Well Purging and Sampling Log

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Revision 1.0
Jul-08

ATC Branch: Seattle, WA #76	Date: 12/7/15	Page 1 of
ATC Representative(s): Mark Newman	Project: Phillips 66 - ~~2061~~ 1396	
	Location: ~~2415 Griffin Avenue~~, Enumclaw, ~~WA~~ WC/M	
Contact Information: 206-781-1449	Project No: 76.75118.2061	Task No:
SMW-3	Contractor: —	
	Weather: —	Temperature: —

Purging & Sampling Instrumentation & Method

Water Level Meter (Model/ID): Envirotech Water Level Meter	Interface Probe (Model/ID):
Water Quality Meter (Model/ID):	Decontamination Method:

Purging Method: ____ PVC Bailer ____ Vacuum Truck ____ Submersible Pump X Peristaltic Pump Other: ____

3 Well Volumes ____ Low Flow X Micro Purge ____ Intake Depth (feet below TOC) 9.75

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer X 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): 14.05
Depth to Water (DTW)(feet): 8.78	Water Column (WC)(feet): 5.27
LNAPL Thickness (ft): —	Purging Start Time: 15:00

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
15:15	8.81	0.15	12.69	865	Clear	0.98	7.50	-123.4	
15:18	8.83	0.18	12.69	869	"	0.93	7.53	-122.2	
15:21	8.83	0.21	12.70	872	"	0.88	7.52	-123.8	
15:24	8.84	0.24	12.71	873	"	0.82	7.53	-122.7	

Sample Data

Sample ID: SMW-3	Time of Sample: 15:25	Filtered (yes/no)	Preservatives	Analytical Parameters
Container Types, Volumes, & Quantities: 6-40ml Vials		N	HCl	6x/8TEX

Well Recovery Data

Maximum Drawdown (DTWm)(feet): 8.84	Approximate Flow Rate (GPM): 0.01
Recovery Type: X Fast ____ Slow	% Recovery = 100

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

Comments:

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Monitoring Well Purging and Sampling Log

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ATC Branch: Seattle, WA
Date: 12/8/15
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ATC Representative(s): Mark Newman
Project: P66-1396
Location: WL/M, Seattle, WA

Contact Information: —
Project No: —
Task No: 7601

MW-41
Contractor: —
Weather: —
Temperature: —

Purging & Sampling Instrumentation & Method

Water Level Meter (Model/ID): Environtape
Interface Probe (Model/ID): —
Water Quality Meter (Model/ID): YSI 556
Decontamination Method: Alconox/DI

Purging Method: ___ PVC Bailer ___ Vacuum Truck ___ Submersible Pump X Peristaltic Pump Other: ___
3 Well Volumes ___ Low Flow X Micro Purge ___ Intake Depth (feet below TOC) 17.00
Sampling Method: ___ Teflon Bailer ___ Disposable Bailer X 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): 19.50
Depth to Water (DTW)(feet): 15.88
Water Column (WC)(feet): 3.62
LNAPL Thickness (ft): —
Purging Start Time: 10:00

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
10:20	15.90	0.20	16.31	1118	Clear	1.01	7.29	133.0	
10:23	15.91	0.23	16.30	1118	"	0.99	7.28	132.7	
10:26	15.91	0.26	16.30	1118	"	0.97	7.28	132.3	
10:29	15.92	0.29	16.27	1118	"	0.94	7.27	131.9	

Sample Data

Sample ID: MW-41
Time of Sample: 10:30

Container Types, Volumes, & Quantities:	Filtered (yes/no)	Preservatives	Analytical Parameters
6-40ml VOAs	N	HCl	6x BTEX

Well Recovery Data

Maximum Drawdown (DTWm)(feet): 15.92
Approximate Flow Rate (GPM): 0.01
Recovery Type: X Fast ___ Slow
% Recovery = 100
Purge Water Disposition (Attach Drum Inventory Log - FLD 108):

Comments:

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Monitoring Well Purging and Sampling Log

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ATC Branch: Seattle, WA

Date: 12/8/15

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ATC Representative(s): M. Newman

Project: Phillips 66 AOC ~~#2061~~ 1396

Location: ~~2445 Griffin Ave, Enumclaw, WA~~ WL/M

Contact Information: 206-781-1449

Project No: Z07600007

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 X Peristaltic Pump Other: ____

3 Well Volumes X Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) 13.00

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer X 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): 25.20

Depth to Water (DTW)(feet): 11.57

Water Column (WC)(feet): 13.63

LNAPL Thickness (ft): —

Purging Start Time: 11:05

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
11:20	11.61	0.15	17.06	1806	Clear	1.13	6.71	-44.8	
11:23	11.62	0.18	17.10	1610	"	1.05	6.72	-45.0	
11:26	11.63	0.21	17.13	1812	"	1.01	6.73	-45.0	
11:29	11.63	0.24	17.16	1812	"	0.93	6.73	-45.0	

Sample Data

Sample ID: MW-216

Time of Sample: 1130

Container Types, Volumes, & Quantities:

6 - 40ml VOAs

2 - 250ml PE

Filtered (yes/no)	Preservative	Analytical Parameters
N	HCl	Gx, BTEX, Dx
Y/N	HNO3/none	Total and Dissolved Pb

Well Recovery Data

Maximum Drawdown (DTWm)(feet): 11.63

Approximate Flow Rate (GPM): 0.01

Recovery Type: X Fast ____ Slow

% Recovery = 100

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

Comments:

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Monitoring Well Purging and Sampling Log

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ATC Branch: Seattle, WA

Date: 12/8/15

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ATC Representative(s): M. Newman

Project: Phillips 66 AOC ~~#2061~~ 1396

Location: ~~2415 Griffin Ave, Enumclaw, WA~~ WL/M

Contact Information: 206-781-1449

Project No: Z07600007

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 X Peristaltic Pump Other: ___

3 Well Volumes X Low Flow ___ Micro Purge ___ Intake Depth (feet below TOC) 13.00

Sampling Method: ___ Teflon Bailer ___ Disposable Bailer X 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): 24.60

Depth to Water (DTW)(feet): 11.37

Water Column (WC)(feet): 13.23 ~~12.86~~

LNAPL Thickness (ft): —

Purging Start Time: 11:45

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
12:00	11.39	0.15	17.38	1346	clear	0.59	6.90	-136.6	
12:03	11.40	0.18	17.43	1343	"	0.58	6.90	-137.2	
12:06	11.40	0.21	17.44	1333	"	0.55	6.89	-137.0	
12:09	11.41	0.24	17.45	1328	"	0.54	6.89	-137.2	

Sample Data

Sample ID: MW-217

Time of Sample: 1210

Container Types, Volumes, & Quantities:

6-40ml

2 - 250ml PE

Filtered (yes/no)	Preservative	Analytical Parameters
N	HCl	Gx, BTEX, Dx
Y/N	HNO3/none	Total and Dissolved Pb

Well Recovery Data

Maximum Drawdown (DTW*m*)(feet): 11.41

Approximate Flow Rate (GPM): 0.01

Recovery Type: X Fast ___ Slow

% Recovery = 100

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

Comments:

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Monitoring Well Purging and Sampling Log

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ATC Branch: Seattle, WA

Date: 12/8/15

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ATC Representative(s): Mark Nemmers

Project: **Phillips 66 AOC #2061**

Location: **2415 Griffin Ave, Enumclaw, WA**

Contact Information: **206-781-1449**

Project No: **Z07600007**

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 __X__ Peristaltic Pump Other: ____

3 Well Volumes __X__ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) 12.00

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer __X__ 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): 24.90

Depth to Water (DTW)(feet): 10.94

Water Column (WC)(feet): 13.96

LNAPL Thickness (ft): —

Purging Start Time: 1230

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
12:40	10.96	0.10	17.25	1204	Clear	0.63	6.73	-17.34	
12:43	10.96	0.13	17.26	1199	"	0.60	6.93	-173.3	
12:46	10.97	0.16	17.28	1194	"	0.57	6.94	-173.2	
12:49	10.97	0.19	17.29	1190	"	0.55	6.94	-172.8	

Sample Data

Sample ID: MW-218

Time of Sample: 1250

Container Types, Volumes, & Quantities:

6-40ml VOAs

~~2~~ 250ml PE

Filtered (yes/no)	Preservative	Analytical Parameters
N	HCl	Gx, BTEX, Dx
Y/N	HNO3/none	Total and Dissolved Pb

Well Recovery Data

Maximum Drawdown (DTW*m*)(feet): 10.77

Approximate Flow Rate (GPM): 0.01

Recovery Type: (Fast) ____ Slow

% Recovery = 100

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

Comments:

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Monitoring Well Purging and Sampling Log

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ATC Branch: Seattle, WA

Date: 12/8/15

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ATC Representative(s): Mark Mumm

Project: Phillips 66 AOC ~~#2061~~ 1396

Location: ~~2415 Griffin Ave, Enumclaw, WA~~ WC/m

Contact Information: 206-781-1449

Project No: Z07600007

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 _X_ Peristaltic Pump Other: ____

3 Well Volumes _X_ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) 10.50

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer _X_ 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): 19.80

Depth to Water (DTW)(feet): 9.78

Water Column (WC)(feet): 10.02

LNAPL Thickness (ft): —

Purging Start Time: 13:30

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
13:45	9.79	0.15	15.72	1078	clear	0.44	6.22	-162.3	
13:48	9.80	0.18	15.72	1078	"	0.43	6.29	-163.0	
13:51	9.80	0.21	15.73	1078	"	0.43	6.25	-164.9	
13:54	9.80	0.24	15.73	1078	"	0.42	6.21	-166.8	

Sample Data

Sample ID: MW-219

Time of Sample: 1355

Container Types, Volumes, & Quantities:

6 - 40ml VOAs

~~2 - 250ml PE~~

Filtered (yes/no)	Preservative	Analytical Parameters
N	HCl	Gx, BTEX, Dx
Y/N	~~HNO3/none~~	~~Total and Dissolved Pb~~

Well Recovery Data

Maximum Drawdown (DTW*m*)(feet): 9.80

Approximate Flow Rate (GPM): 0.01

Recovery Type: _X_ Fast ____ Slow

% Recovery = 100

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

Comments:

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Monitoring Well Purging and Sampling Log

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ATC Branch: Seattle, WA	Date: 12/07/15	Page of
ATC Representative(s): S. Payne	Project: Phillips 66 AOC #~~2081~~ 1896	
	Location: ~~2445 Griffin Ave, Enumclaw, WA~~ 600 W Lake, Seattle	
Contact Information: 206-781-1449	Project No: Z07600007	Task No: 7601
Well ID: MW-50	Weather: Rain	Temperature: 50°F

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 X Peristaltic Pump Other: ____

3 Well Volumes X Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) 14

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer X 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 7.34 x CM 0.16 = 1.17 (CV)(gal) x 3.0 CV (gal) = 3.5 PV

Monitoring Measurements

Depth to LNAPL (feet):	Total Well Depth (feet): 19.35
Depth to Water (DTW)(feet): 12.01	Water Column (WC)(feet): 7.34
LNAPL Thickness (ft):	Purging Start Time: 09:45

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
09:55	12.01	0.1	12.4	1575	clear	0.29	5.85	-268.0	
10:00	12.41	0.15	12.5	1433	clear	0.23	5.93	-280.2	
10:03	12.55	0.18	12.4	1431	clear	0.23	5.94	-277.1	
10:02	12.55	0.2	12.5	1426	clear	0.23	5.94	-276.6	

Sample Data

Sample ID: MW-50	Time of Sample: 10:05	Filtered (yes/no)	Preservative	Analytical Parameters
Container Types, Volumes, & Quantities:				
6 VOA		N	HCl	Gx, BTEX, Dx
~~2 - 250ml~~ LPE		~~Y/N~~	~~HNO3/none~~	~~Total and Dissolved Pb~~

Well Recovery Data

Maximum Drawdown (DTW*m*)(feet):	Approximate Flow Rate (GPM): 0.01
Recovery Type: ✓ Fast ____ Slow	% Recovery = 100

Purge Water Disposition (Attach Drum Inventory Log - FLD 108): into existing on site system

Comments:

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Monitoring Well Purging and Sampling Log

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ATC Branch: Seattle, WA #76	Date: 12/07/15	Page 1 of 1
ATC Representative(s): MWRT SP S. Payne	Project: Phillips 66 - ~~2061~~ 1396	
	Location: ~~2415 Griffin Avenue, Enumclaw, WA~~ 600 W Lake	
Contact Information: 206-781-1449	Project No: 76.75118.2061	Task No:
SPot MWR-1	Contractor:	
	Weather: Rain	Temperature: ~50

Purging & Sampling Instrumentation & Method

Water Level Meter (Model/ID): Envirotech Water Level Meter	Interface Probe (Model/ID):
Water Quality Meter (Model/ID): YSI 556	Decontamination Method:

Purging Method: ____ PVC Bailer ____ Vacuum Truck ____ Submersible Pump ✓ Peristaltic Pump Other: ____

3 Well Volumes ✓ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) 12

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 6.92 x CM 0.16 = 1.1 (CV)(gal) x 3.0 CV (gal) = 3.3 PV

Monitoring Measurements

Depth to LNAPL (feet):	Total Well Depth (feet): 17.50
Depth to Water (DTW)(feet): 10.58	Water Column (WC)(feet): 6.92
LNAPL Thickness (ft):	Purging Start Time: 12:15

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
12:25	10.62	0.1	10.0	905	clear	1.38	6.99	-200.1	
12:30	10.62	0.15	9.9	905	clear	1.39	6.99	-206.3	
12:33	10.62	0.18	9.8	904	clear	1.33	7.00	-211.0	
12:35	10.62	0.2	9.8	904	clear	1.34	7.00	-215.1	

Sample Data

Sample ID: MWR-1	Time of Sample: 12:35	Filtered (yes/no)	Preservatives	Analytical Parameters
Container Types, Volumes, & Quantities:				
6 VOA		N	HCL	Gx, Dx, VOCs

Well Recovery Data

Maximum Drawdown (DTWm)(feet): 10.62	Approximate Flow Rate (GPM): 0.01
Recovery Type: ✓ Fast ____ Slow	% Recovery = 100

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

Comments:

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Monitoring Well Purging and Sampling Log

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ATC Branch: Seattle, WA	Date: 12/07/15	Page 1 of 1
ATC Representative(s):	Project: Phillips 66 AOC ~~#2061~~ 1896	
	Location: ~~2415 Griffin Ave, Enumclaw, WA~~ 600 W Lake	
Contact Information: **206-781-1449**	Project No: **Z07600007**	Task No: 7601
Well ID: MWR-3	Weather: Rain	Temperature: 50°F

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 __X__ Peristaltic Pump Other: ____

3 Well Volumes __X__ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) 12

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer __X__ 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 6.71 x CM 0.16 = 1 (CV)(gal) x 3.0 CV (gal) = 3 PV

Monitoring Measurements

Depth to LNAPL (feet):	Total Well Depth (feet): 17.10
Depth to Water (DTW)(feet): 10.39	Water Column (WC)(feet): 6.71
LNAPL Thickness (ft):	Purging Start Time: 11:35

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
11:45	10.41	0.1	11.5	967	clear	0.18	6.90	-279.7	
11:50	10.41	0.15	11.5	967	clear	0.17	6.91	-281.2	
11:53	10.42	0.18	11.6	968	clear	0.17	6.91	-284.3	
11:55	10.42	0.2	11.5	968	clear	0.17	6.91	-287.9	

Sample Data

Sample ID: MWR-3 Time of Sample: 11:55

Container Types, Volumes, & Quantities:	Filtered (yes/no)	Preservative	Analytical Parameters
6 VOA	N	HCl	Gx, BTEX, Dx
~~2 - 250ml PE~~	~~Y/N~~	~~HNO3/none~~	~~Total and Dissolved Pb~~

Well Recovery Data

Maximum Drawdown (DTW*m*)(feet):	Approximate Flow Rate (GPM): 0.01
Recovery Type: ____ Fast ____ Slow	% Recovery = 100

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

Comments:

Cardno ATC
Shaping the Future

Monitoring Well Purging and Sampling Log

FLD-103
Revision 1.0
Jul-08

ATC Branch: Seattle, WA	Date: 12/07/15	Page 1 of 1
ATC Representative(s): S. Payne	Project: Phillips 66 AOC #~~2081~~ 1396	
	Location: ~~2415 Griffin Ave, Enumclaw, WA~~ 600 W Lake	
Contact Information: 206-781-1449	Project No: Z07600007	Task No: 7601
Well ID: MW-45		
	Weather: Rain	Temperature: 50°F

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 X Peristaltic Pump Other: ____

3 Well Volumes X Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) 10

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer X 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 11.41 x CM 0.16 = 1.8 (CV)(gal) x 3.0 CV (gal) = 5.5 PV

Monitoring Measurements

Depth to LNAPL (feet):	Total Well Depth (feet): 19.50
Depth to Water (DTW)(feet): 8.09	Water Column (WC)(feet): 11.41
LNAPL Thickness (ft):	Purging Start Time: 10:30

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
10:40	8.10	0.1	10.6	920	clear	0.26	6.21	-257.7	
10:45	8.10	0.15	10.6	886	clear	0.20	6.21	-259.8	
10:48	8.10	0.18	10.6	883	clear	0.21	6.21	-262.8	
10:50	8.10	0.2	10.5	880	clear	0.21	6.21	-262.3	

Sample Data

Sample ID: MW-45	Time of Sample: 10:50	Filtered (yes/no)	Preservative	Analytical Parameters
Container Types, Volumes, & Quantities:				
6 VOA		N	HCl	Gx, BTEX, Dx
~~2 - 250ml PE~~		~~Y/N~~	~~HNO3/none~~	~~Total and Dissolved Pb~~

Well Recovery Data

Maximum Drawdown (DTW*m*)(feet): 8.10	Approximate Flow Rate (GPM): 0.01
Recovery Type: ✓ Fast ____ Slow	% Recovery = 100

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

Comments:

Cardno ATC
Shaping the Future

Monitoring Well Purging and Sampling Log

FLD-103
Revision 1.0
Jul-08

ATC Branch: Seattle, WA	Date: 12/07/15	Page 1 of 1
ATC Representative(s): S. Payne	Project: Phillips 66 AOC ~~#2061~~ 1396	
	Location: ~~2415 Griffin Ave, Enumclaw, WA~~ 600 W Lake	
Contact Information: 206-781-1449	Project No: Z07600007	Task No: 7601
Well ID: MW-209		
	Weather: Rain	Temperature: 50

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 X Peristaltic Pump Other: ____

3 Well Volumes X Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) 10

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer X 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 10.73 x CM 0.16 = 1.7 (CV)(gal) x 3.0 CV (gal) = 5.2 PV

Monitoring Measurements

Depth to LNAPL (feet):	Total Well Depth (feet): 19.50
Depth to Water (DTW)(feet): 8.77	Water Column (WC)(feet): 10.73
LNAPL Thickness (ft):	Purging Start Time: 14:15

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
14:25	8.81	0.1	10.0	106.4	clear	8.64	6.92	-32.5	
14:30	8.81	0.15	10.0	76.2	clear	8.66	6.90	-31.6	
14:33	8.82	0.18	10.0	70.1	clear	8.75	6.88	-30.6	
14:35	8.82	0.2	10.0	69.0	clear	8.74	6.87	-30.5	

Sample Data

Sample ID:	Time of Sample: 14:35	Filtered (yes/no)	Preservative	Analytical Parameters
Container Types, Volumes, & Quantities:				
6 VOAs		N	HCl	Gx, BTEX, Dx
~~2 250ml PE~~		~~Y/N~~	~~HNO3/none~~	~~Total and Dissolved~~ Pb

Well Recovery Data

Maximum Drawdown (DTW*m*)(feet): 8.82	Approximate Flow Rate (GPM): 0.01
Recovery Type: ✓ Fast ____ Slow	% Recovery = 100

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

Comments:

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Monitoring Well Purging and Sampling Log

FLD-103
Revision 1.0
Jul-08

ATC Branch: Seattle, WA #76
Date: 12/08/15
Page 1 of

ATC Representative(s): SP
Project: Phillips 66 - ~~2061~~ 1396
Location: ~~2415 Griffin Avenue, Enumclaw, WA~~ 600 W Lake

Contact Information: 206-781-1449
Project No: ~~76.75418.2061~~
Task No:

MW-213
Contractor: —
Weather: Rain
Temperature: 55°F

Purging & Sampling Instrumentation & Method

Water Level Meter (Model/ID): Envirotech Water Level Meter
Interface Probe (Model/ID): —
Water Quality Meter (Model/ID): YSI 556
Decontamination Method: —

Purging Method: ____ PVC Bailer ____ Vacuum Truck ____ Submersible Pump ✓ Peristaltic Pump Other: ____
3 Well Volumes ✓ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) 8
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): 20.20
Depth to Water (DTW)(feet): 6.67
Water Column (WC)(feet): 13.53
LNAPL Thickness (ft):
Purging Start Time: 09:20

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
09:30	6.67	0.1	13.9	370	clear	1.38	9.10	0.5	
09:35	6.67	0.15	13.9	370	clear	1.24	9.10	-6.5	
09:40	6.67	0.2	13.9	370	clear	1.62	9.10	-6.6	
09:45	6.67	0.25	13.9	369	clear	1.23	9.10	-7.1	

Sample Data

Sample ID: MW-213
Time of Sample: 09:45

Container Types, Volumes, & Quantities:	Filtered (yes/no)	Preservatives	Analytical Parameters
6 VOA	N	HCL	

Well Recovery Data

Maximum Drawdown (DTW*m*)(feet): 6.67
Approximate Flow Rate (GPM): 0.01
Recovery Type: ✓ Fast ____ Slow
% Recovery = 100

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

Comments:

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Monitoring Well Purging and Sampling Log

FLD-103
Revision 1.0
Jul-08

ATC Branch: Seattle, WA	Date: 12/08/15	Page 1 of 1
ATC Representative(s): SP	Project: P66-1396	
	Location: 600 Westlake Avenue, Seattle, WA	
Contact Information: 206-781-1449	Project No: 76.75118.1396	Task No: 7601
MW-214	Contractor: N/A	
	Weather: Rain	Temperature: 55 °F

Purging & Sampling Instrumentation & Method

Water Level Meter (Model/ID): Envirotech Water Level Meter	Interface Probe (Model/ID): NA
Water Quality Meter (Model/ID): YSI 556 MPS	Decontamination Method: Alconox/DI

Purging Method: _____ PVC Bailer _____ Vacuum Truck _____ Submersible Pump _____ Peristaltic Pump Other: _____

3 Well Volumes _____ Low Flow _____ Micro Purge _____ Intake Depth (feet below TOC) 8

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 10.33 x CM 0.16 = 1.7 (CV)(gal) x 3.0 CV (gal) = 5.1 PV

Monitoring Measurements

Depth to LNAPL (feet):	Total Well Depth (feet): 17.19
Depth to Water (DTW)(feet): 6.86	Water Column (WC)(feet): 10.33
LNAPL Thickness (ft):	Purging Start Time: 10:25

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
10:35	6.86	0.1	13.9	300.8	clear	5.37	10.48	-16.2	
10:40	6.86	0.15	13.9	300.6	clear	5.52	10.48	-17.2	
10:43	6.87	0.18	13.9	300.5	clear	5.48	10.48	-20.9	
10:45	6.87	0.2	13.9	300.1	clear	5.54	10.48	-21.4	

Sample Data

Sample ID: MW-214	Time of Sample: 10:45	Filtered (yes/no)	Preservatives	Analytical Parameters
Container Types, Volumes, & Quantities:				
6 VOA		N	HCL	

Well Recovery Data

Maximum Drawdown (DTWm)(feet): 6.87	Approximate Flow Rate (GPM): 0.01
Recovery Type: ✓ Fast _____ Slow	% Recovery = 100

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

Comments:

Cardno ATC
Shaping the Future

Monitoring Well Purging and Sampling Log

FLD-103
Revision 1.0
Jul-08

ATC Branch: Seattle, WA	Date: 12/08/15	Page 1 of 1
ATC Representative(s): SP	Project: P66-1396	
	Location: 600 Westlake Avenue, Seattle, WA	
Contact Information: 206-781-1449	Project No: 76.75118.1396	Task No: 7601
MW-215	Contractor: N/A	
	Weather: Rain	Temperature: 55

Purging & Sampling Instrumentation & Method

Water Level Meter (Model/ID): Envirotech Water Level Meter
Interface Probe (Model/ID): NA
Water Quality Meter (Model/ID): YSI 556 MPS
Decontamination Method: Alconox/DI
Purging Method: ____ PVC Bailer ____ Vacuum Truck ____ Submersible Pump ✓ Peristaltic Pump Other: ____
3 Well Volumes ____ Low Flow ____ Micro Purge ✓ Intake Depth (feet below TOC) 8
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 10.96 x CM 0.16 = 1.8 (CV)(gal) x 3.0 CV (gal) = 5.4 PV

Monitoring Measurements

Depth to LNAPL (feet):
Depth to Water (DTW)(feet): 6.24
LNAPL Thickness (ft):
Total Well Depth (feet): 17.20
Water Column (WC)(feet): 10.96
Purging Start Time: 11:15

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
11:25	6.24	0.1	15.3	849	clear	0.94	5.91	-35.2	
11:30	6.27	0.15		851		0.70		-35.9	
11:33	6.27	0.18		851		1.14		-36.3	
11:35	6.27	0.2		852		0.73		-36.7	

Sample Data

Sample ID: MW-215
Time of Sample: 11:35

Container Types, Volumes, & Quantities:	Filtered (yes/no)	Preservatives	Analytical Parameters
6 VOA	N	HCL	

Well Recovery Data

Maximum Drawdown (DTW*m*)(feet): 6.27
Approximate Flow Rate (GPM): 0.01
Recovery Type: ✓ Fast ____ Slow
% Recovery = 100
Purge Water Disposition (Attach Drum Inventory Log - FLD 108): System

Comments: