GW – 028

Annual DP Report (Part 4 of 16)

2015

Cooling Tower Blowdown to City	Y-11 GPM	Y-1 GPM	Total GPM		WWT to POTW GPM	
3/27/15	57	41	98	141120	0.0	0
3/28/15	59	42	101	145440	0.0	0
3/29/15	58	42	100	144000	0.0	0
3/30/15	54	42	96	138240	2.4	3456
3/31/15	56	40	96	138240	3.0	4320
4/1/15	57	40	97	139680	3.0	4320
4/2/15	57	40	97	139680	2.8	3960
4/3/15	59	40	99	142560	2.6	3787.2
4/4/15	61	39	100	144000	1.5	2160
4/5/15	63	38	101	145440	2.9	4176
4/6/15	63	38	101	145440	2.8	4032
4/7/15	63	38	101	145440	2.8	4032
4/8/15	62	37	99	142560	2.7	3888
4/9/15	61	36	97	139680	2.2	3168
4/10/15	60	36	96	138240	0.0	0
4/11/15	59	36	95	136800	0.0	0
4/12/15	60	39	99	142560	0.0	0
4/13/15	61	37	98	141120	0.0	0
4/14/15	54	34	88	126720	0.0	0
4/15/15	58	33	91	131040	0.0	0
4/16/15	45	31	76	109440	1.6	2304
4/17/15	71	5	76	109440	0.5	720
4/18/15	37	30	67	96480	1.4	2016
4/19/15	35	41	76	109440	1.1	1584
4/20/15	45	41	86	123840	2.8	4032
4/21/15	40	41	81	116640	2.6	3744
4/22/15	38	39	77	110880	1.0	1440
4/23/15	33	35	68	97920	2.8	4032
4/24/15	39	35	74	106560	3.0	4320
4/25/15	43	35	78	112320	0.5	720
4/26/15	40	35	75	108000	0.0	0
4/27/15	33	35	68	97920	0.0	0
4/28/15	60	35	95	136800	0.0	0
4/29/15	60	35	95	136800	0.0	0
4/30/15	60	35	95	136800	0.0	0

Cooling Tower Blowdown to City	Y-11 GPM	Y-1 GPM	Total GPM		WWT to POTW GPM		
5/1/15	60	35	95	136800	0.0		0
5/2/15	60	35	95	136800	1.6		2304
5/3/15	60	35	95	136800	0.6		864
5/4/15	60	35	95	136800	0.0		0
5/5/15	60	35	95	136800	0.5		720
5/6/15	60	35	95	136800	1.7		2448
5/7/15	60	36	96	138240	0.0		0
5/8/15	60	36	96	138240	0.0		0
5/9/15	60	35	95	136800	0.0		0
5/10/15	61	36	97	139680	0.0		0
5/11/15	61	36	97	139680	0.0		0
5/12/15	61	36	97	139680	0.0		0
5/13/15	60	36	96	138240	0.0		0
5/14/15	60	36	96	138240	1.1		1584
5/15/15	59	36	95	136800	2.8		4032
5/16/15	59	35	94	135360	2.8		4032
5/17/15	60	36	96	138240	0.9		1296
5/18/15	52	36	88	126720	1.0		1440
5/19/15	40	36	76	109440	0.0	Y-11 Flow	0
5/20/15	7	36	43	61920	0.0		0
5/21/15	0	37	37	53280	2.4		3456
5/22/15	34	37	71	102240	2.1		3024
5/23/15	48	37	85	122400	0.9		1296
5/24/15	48	38	86	123840	1.0		1440
5/25/15	56	37	93	133920	2.9		4176
5/26/15	66	37	103	148320	0.0		0
5/27/15	72	37	109	156960	0.0		0
5/28/15	64	36	100	144000	2.6		3744
5/29/15	63	36	99	142560	5.4		7776
5/30/15	57	36	93	133920	0.9		1296
5/31/15	62	36	98	141120	1.4		2016
6/1/15	64	36	100	144000	1.9	Y-11 Flow	2736
6/2/15	61	35	96	138240	1.4		2016
6/3/15	54	39	93	133920	0.9		1296
6/4/15	56	39	95	136800	1.4		2016

Cooling Tower Blowdown to City	Y-11 GPM	Y-1 GPM	Total GPM		WWT to POTW GPM	
6/5/15	62	38	100	144000	2.9	4176
6/6/15	60	37	97	139680	2.0	2880
6/7/15	60	37	97	139680	0.0	0
6/8/15	59	38	97	139680	0.0	0
6/9/15	59	37	96	138240	0.0	0
6/10/15	58	37	95	136800	0.0	0
6/11/15	57	36	93	133920	1.5	2160
6/12/15	59	36	95	136800	0.3	432
6/13/15	61	37	98	141120	0.0	0
6/14/15	60	38	98	141120	0.0	0
6/15/15	61	36	97	139680	0.0	0
6/16/15	61	34	95	136800	0.0	0
6/17/15	61	36	97	139680	0.0	0
6/18/15	60	36	96	138240	0.0	0
6/19/15	60	26	86	123840	0.0	0
6/20/15	58	22	80	115200	0.0	0
6/21/15	57	21	78	112320	0.1	144
6/22/15	62	25	87	125280	0.0	0
6/23/15	64	31	95	136800	0.0	0
6/24/15	64	31	95	136800	0.0	0
6/25/15	64	30	94	135360	0.0	0
6/26/15	64	29	93	133920	0.0	0
6/27/15	64	29	93	133920	0.0	0
6/28/15	65	29	94	135360	0.0	0
6/29/15	63	31	94	135360	0.0	0
6/30/15	60	30	90	129600	0.0	0
7/1/15	27	37	64	92160	0.0	0
7/2/15	0	38	38	54720	0.0	0
7/3/15	0	40	40	57600	0.0	0
7/4/15	0	38	38	54720	0.0	0
7/5/15	0	39	39	56160	0.0	0
7/6/15	0	40	40	57600	0.0	0
7/7/15	34	30	64	92160	0.0	0
7/8/15	63	25	88	126720	0.0	0
7/9/15	63	23	86	123840	2.5	3600

Cooling Tower Blowdown to City	Y-11 GPM	Y-1 GPM	Total GPM		WWT to POTW GPM	
7/10/15	63	23	86	123840	1.3	1872
7/11/15	63	23	86	123840	0.8	1152
7/12/15	64	21	85	122400	0.0	0
7/13/15	64	29	93	133920	0.0	0
7/14/15	63	19	82	118080	0.0	0
7/15/15	64	17	81	116640	0.0	0
7/16/15	62	18	80	115200	0.0	0
7/17/15	62	25	87	125280	0.0	0
7/18/15	60	28	88	126720	0.0	0
7/19/15	58	37	95	136800	0.0	0
7/20/15	54	43	97	139680	0.0	0
7/21/15	41	26	67	96480	0.0	0
7/22/15	38	24	62	89280	0.0	0
7/23/15	41	22	63	90720	0.0	0
7/24/15	26	16	42	60480	0.0	0
7/25/15	14	12	26	37440	0.0	0
7/26/15	8	10	18	25920	0.0	0
7/27/15	8	11	19	27360	0.0	0
7/28/15	37	19	56	80640	0.0	0
7/29/15	61	28	89	128160	0.0	0
7/30/15	61	29	90	129600	0.0	0
7/31/15	56	43	99	142560	0.0	0
8/1/15	55	42	97	139680	0.0	0
8/2/15	55	42	97	139680	0.0	0
8/3/15	54	42	96	138240	0.0	0
8/4/15	52	41	93	133920	0.0	0
8/5/15	50	40	90	129600	0.0	0
8/6/15	48	39	87	125280	0.0	0
8/7/15	47	38	85	122400	0.0	0
8/8/15	52	41	93	133920	0.0	0
8/9/15	55	43	98	141120	0.0	0
8/10/15	55	43	98	141120	0.0	0
8/11/15	54	43	97	139680	0.0	0
8/12/15	55	43	98	141120	0.0	0
8/13/15	55	43	98	141120	0.0	0

Cooling Tower Blowdown to City	Y-11 GPM	Y-1 GPM	Total GPM		WWT to POTW GPM	
8/14/15	55	43	98	141120	0.0	0
8/15/15	55	43	98	141120	0.0	0
8/16/15	56	43	99	142560	0.0	0
8/17/15	55	43	98	141120	0.0	0
8/18/15	55	43	98	141120	0.0	0
8/19/15	55	43	98	141120	0.0	0
8/20/15	55	43	98	141120	0.0	0
8/21/15	55	44	99	142560	0.0	0
8/22/15	55	45	100	144000	0.6	864
8/23/15	55	44	99	142560	0.0	0
8/24/15	54	43	97	139680	0.0	0
8/25/15	55	43	98	141120	0.0	0
8/26/15	56	42	98	141120	0.0	0
8/27/15	55	42	97	139680	0.0	0
8/28/15	55	43	98	141120	0.0	0
8/29/15	56	42	98	141120	0.0	0
8/30/15	57	43	100	144000	0.0	0
8/31/15	56	43	99	142560	0.0	0
9/1/15	56	42	98	141120	0.0	0
9/2/15	56	42	98	141120	1.8	2592
9/3/15	56	42	98	141120	0.0	0
9/4/15	56	42	98	141393.3161	0.0	0
9/5/15	56	42	98	141620.2682	0.0	0
9/6/15	57	42	99	142613.5423	0.0	0
9/7/15	57	43	99	143206.6358	0.0	0
9/8/15	56	42	99	142111.9499	0.0	0
9/9/15	56	42	98	141551.256	0.0	0
9/10/15	56	42	98	141265.5211	0.0	0
9/11/15	56	42	98	141163.6897	0.0	0
9/12/15	56	42	98	141265.6903	0.0	0
9/13/15	57	42	98	141682.2969	1.6	2304
9/14/15	57	42	99	142282.2787	1.1	1584
9/15/15	56	42	99	141869.7148	0.0	0
9/16/15	56	42	98	141533.0226	0.0	0
9/17/15	57	42	99	142370.4564	0.0	0

Cooling Tower Blowdown to City	Y-11 GPM	Y-1 GPM	Total GPM		WWT to POTW GPM	
9/18/15	57	43	100	143943.4109	0.0	0
9/19/15	53	42	95	137515.3985	0.0	0
9/20/15	44	36	80	115211.6975	0.0	0
9/21/15	42	34	76	109440	0.0	0
9/22/15	51	40	91	131040	0.0	0
9/23/15	56	44	100	144000	0.0	0
9/24/15	55	43	98	141120	0.0	0
9/25/15	55	43	98	141120	0.0	0
9/26/15	56	42	98	141120	0.0	0
9/27/15	56	42	98	141120	0.0	0
9/28/15	56	42	98	141120	0.0	0
9/29/15	54	43	97	139680	0.0	0
9/30/15	54	44	98	141120	0.0	0
10/1/15	54	44	98	141120	0.0	0
10/2/15	54	43	97	140363.2712	0.0	0
10/3/15	53	43	96	138426.0321	0.0	0
10/4/15	51	41	92	132024.7653	0.0	0
10/5/15	52	39	91	131446.3963	0.0	0
10/6/15	51	40	91	131348.7678	0.0	0
10/7/15	51	40	91	131633.2613	0.0	0
10/8/15	51	40	91	130935.6563	0.0	0
10/9/15	52	40	92	132984.3366	0.0	0
10/10/15	53	37	90	129526.1364	1.1	1584
10/11/15	54	37	91	130574.2186	2.6	3744
10/12/15	54	36	90	129600	2.9	4176
10/13/15	54	34	88	126720	1.3	1872
10/14/15	52	33	85	122400	0.0	0
10/15/15	51	32	83	119520	1.1	1584
10/16/15	50	26	76	109440	1.4	2016
10/17/15	56	28	84	120960	0.0	0
10/18/15	59	30	89	128160	2.9	4176
10/19/15	59	30	89	128160	3.0	4320
10/20/15	59	28	87	125280	3.0	4320
10/21/15	59	27	86	123840	1.1	1584
10/22/15	59	26	85	122400	1.1	1584

Cooling Tower Blowdown to City	Y-11 GPM	Y-1 GPM	Total GPM		WWT to POTW GPM		
10/23/15	59	26	85	122400	2.9		4176
10/24/15	59	27	86	123840	3.0		4320
10/25/15	60	27	87	125280	1.4		2016
10/26/15	59	27	86	123840	2.9		4176
10/27/15	59	27	86	123840	2.6		3744
10/28/15	60	27	87	125280	2.1		3024
10/29/15	60	25	85	122400	1.8		2592
10/30/15	60	25	85	122400	2.1		3024
10/31/15	61	25	86	123840	0.0		0
11/1/15	61	25	86	123840	0.0		0
11/2/15	60	25	85	122400	0.1		144
11/3/15	60	25	85	122400	2.9		4176
11/4/15	60	24	84	120960	2.8		4032
11/5/15	59	23	82	118080	2.1		3024
11/6/15	60	23	83	119520	1.3		1872
11/7/15	59	23	82	118080	2.9		4176
11/8/15	59	24	83	119520	2.9		4176
11/9/15	60	24	84	120960	1.1		1584
11/10/15	59	32	91	131040	2.9		4176
11/11/15	59	16	75	108000	0.8	Y1 blowdo	1152
11/12/15	59	13	72	103680	0.0		0
11/13/15	59	15	74	106560	2.9		4176
11/14/15	59	10	69	99360	2.9		4176
11/15/15	59	26	85	122400	2.9		4176
11/16/15	58	5	63	90720	2.9		4176
11/17/15	59	-3	56	80640	3.0		4320
11/18/15	58	13	71	102240	3.0		4320
11/19/15	58	5	63	90720	2.4		3456
11/20/15	58	15	73	105120	0.6		864
11/21/15	58	-3	55	79200	2.9		4176
11/22/15	57	16	73	105120	1.5		2160
11/23/15	61	28	89	128160	2.0		2880
11/24/15	58	26	84	120960	3.0		4320
11/25/15	55	18	73	105120	2.9		4176
11/26/15	53	35	88	126720	1.9		2736

Cooling Tower Blowdown to City	Y-11 GPM	Y-1 GPM	Total GPM		WWT to POTW GPM	
11/27/15	54	-3	51	73440	0.0	0
11/28/15	55	-3	52	74880	2.0	2880
11/29/15	55	-3	52	74880	0.3	432
11/30/15	54	-2	52	74880	0.0	0
12/1/15	54	-2	52	74880	0.0	0
12/2/15	52	17	69	99360	2.5	3600
12/3/15	52	29	81	116640	2.9	4176
12/4/15	50	34	84	120960	3.0	4320
12/5/15	51	9	60	86400	1.3	1872
12/6/15	52	37	89	128160	2.6	3744
12/7/15	51	24	75	108000	1.8	2592
12/8/15	51	28	79	113760	2.1	3024
12/9/15	51	36	87	125280	2.1	3024
12/10/15	51	49	100	144000	1.6	2304
12/11/15	51	62	113	162720	3.0	4320
12/12/15	47	48	95	136800	3.0	4320
12/13/15	50	13	63	90720	3.0	4320
12/14/15	53	47	100	144000	3.0	4320
12/15/15	49	22	71	102240	0.4	576
12/16/15	49	17	66	95040	0.0	0
12/17/15	45	7	52	74880	0.0	0
12/18/15	35	15	50	72000	1.4	2016
12/19/15	31	12	43	61920	2.9	4176
12/20/15	23	3	26	37440	2.9	4176
12/21/15	36	21	57	82080	2.9	4176
12/22/15	55	45	100	144000	2.9	4176
12/23/15	51	56	107	154080	2.3	3312
12/24/15	43	65	108	155520	0.0	0
12/25/15	55	65	120	172800	1.5	2160
12/26/15	36	48	84	120960	2.9	4176
12/27/15	31	-3	28	40320	2.3	3312
12/28/15	25	2	27	38880	0.0	0
12/29/15	18	20	38	54720	0.0	0
12/30/15	15	14	29	41760	2.6	3744
12/31/15	19	1	20	28800	3.0	4320

Cooling Tower Blowdown to City	Y-11 GPM	Y-1 GPM	Total GPM	WWT to POTW GPM	
1/1/16	18	-3	15	2.8	
1/2/16	37	-3	34	1.5	
1/3/16	48	-3	45	0.0	
1/4/16	57	19	76	0.0	
1/5/16	51	33	84	0.6	Y1 blowdown meter repaired.
1/6/16	51	32	83	2.0	
1/7/16	53	32	85	0.0	
1/8/16	52	30	82	0.0	
1/9/16	57	26	83	2.3	
1/10/16	56	23	79	0.5	
1/11/16	57	23	80	0.0	
1/12/16	54	22	76	0.0	
1/13/16	55	22	77	0.0	
1/14/16	56	22	78	0.0	
1/15/16	53	21	74	0.0	
1/16/16	57	20	77	0.3	
1/17/16	56	20	76	0.0	
1/18/16	58	19	77	0.0	
1/19/16	56	19	75	0.0	
1/20/16	54	16	70	0.0	
1/21/16	56	16	72	0.0	
1/22/16	56	15	71	0.0	
1/23/16	57	15	72	0.0	
1/24/16	51	15	66	0.0	
1/25/16	55	14	69	0.0	
1/26/16	55	14	69	0.0	
1/27/16	56	13	69	0.0	
1/28/16	57	12	69	0.0	
1/29/16	52	12	64	0.0	
1/30/16	60	11	71	0.0	
1/31/16	53	10	63	0.0	

Cooling Tower Blowdown to City	Y-11 GPM	Y-1 GPM	Total GPM		WWT to POTW GPM	
					0.0	Y-11 blocked in due to leak on FFC OH water coolers @ 12 noon on 2/1/2016.
2/1/16	31	13	44			
2/2/16	0	20	20		0.0	
2/3/16	0					
			total gal	40,568,659		617,443
			total bbl	965,920		14,701

B.3 RO Reject Discharge Volumes

STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION COMMISSION
OIL CONSERVATION DIVISION

IN THE MATTER OF
Navajo Refining Company, L.L.C. **No. WQA-OCD-CO-2015-002**

AGREED COMPLIANCE ORDER

Pursuant to the New Mexico Water Quality Act, NMSA 1978, Section 74-6-1 through 74-6-17, as amended ("Act"), and the regulations promulgated under the Act, the Oil Conservation Commission and the Oil Conservation Division of the Energy, Minerals and Natural Resources Department of the State of New Mexico (together "OCD") issue this Agreed Compliance Order, including Exhibit A attached hereto (together, the "Order") to Navajo Refining Company L.L.C. ("Navajo"), directing compliance with the Act, the Water Quality Control Commission ("WQCC") Regulations and permits issued under the Act.

I. FINDINGS AND DETERMINATIONS

1. The Oil Conservation Commission is a "constituent agency" under the Act and is charged with administration and enforcement of the Act and regulations promulgated in accordance with the Act. NMSA 1978, Section 74-6-3(K). The Oil Conservation Division of the Energy, Minerals, and Natural Resources Department has concurrent authority with the Oil Conservation Commission. NMSA 1978, Section 70-2-6(B).

2. Navajo is a limited liability company doing business in New Mexico. Navajo is an active entity with a principal address of 501 East Main Street, Artesia, New Mexico 88210.

3. Navajo owns and operates a petroleum refinery located at 501 East Main Street, Artesia, New Mexico ("Facility").

4. The WQCC has adopted regulations, pursuant to the Act, requiring permits for the discharge of fluids directly or indirectly into groundwater. Section 20.6.2.3106 NMAC. For

groundwater discharges at oil and gas operations, including refineries, the WQCC has delegated administration and enforcement of those regulations to OCD.

5. Pursuant to the Act and the WQCC Regulations, on August 22, 2012, OCD issued Discharge Permit GW-028 to Navajo for the discharge of reverse osmosis ("RO") reject fluid to the surface at two farms located at the Facility. The permit included a 10,000 barrel per day discharge limit based on historic discharges from existing RO units.

6. In 2011, Navajo installed a temporary RO unit to serve as a back-up for and to supplement the capacity of the two existing permanent RO units operating at the Facility (the "third temporary RO unit"). Navajo did not obtain a groundwater discharge permit modification at the time the third temporary RO unit was installed.

7. On March 13, 2015, Navajo orally notified OCD that, as a result of the installation of the third temporary RO unit in 2011, Navajo had, on an average annual basis, been discharging RO reject fluid in excess of the 10,000 barrel per day discharge limit in Discharge Permit GW-028.

8. On March 27, 2015, Navajo representatives met with OCD to provide further information regarding discharges of RO reject fluid from the third temporary RO unit and the steps Navajo is taking to address these discharges.

9. Based on the disclosures made by Navajo, OCD has determined that Navajo has committed the following violations:

a. submission of inaccurate Annual Discharge Permit Reports pursuant to Condition 2.F. of Discharge Permit GW-028;

b. exceeding the RO discharge volume limit in Condition 4.A. of Discharge Permit GW-028;

c. failing to collect semi-annual samples of discharges from the third temporary RO unit pursuant to Condition 4.B. of Discharge Permit GW-028.

10. On April 10, 2015, Navajo submitted revised annual reports for 2012, 2013 and 2014 which added the daily discharge data for the third temporary RO unit.

11. Operation of all three RO units is critical to the continued operation of the Facility. As a result, operational changes cannot be relied upon to reduce discharge volumes. Navajo is taking prompt action to address the violation and is preparing an application to modify Discharge Permit GW-028 to authorize Navajo to discharge a quantity of RO reject fluid that is consistent with Navajo's current and intended future use of the Facility. Navajo is also evaluating options—such as underground injection—that may eliminate or significantly reduce surface discharges as a primary means of disposing of RO reject fluid.

12. There is no known or anticipated damage or injury to public health or the environment resulting from the discharges identified above, since the discharges take place solely on land owned by Navajo and, moreover, Navajo's groundwater monitoring system has not confirmed any human health or environmental risks that may be attributed to the discharge of RO reject fluid in excess of permitted amounts.

II. CONCLUSIONS

1. OCD has jurisdiction over the parties and subject matter in this proceeding.

2. Navajo is a person as defined by NMSA 1978, Section 74-6-2.I.

3. Based on the facts presented above, the lack of known or anticipated damage or injury to public health or the environment, the commitments made herein by Navajo, the company's history of compliance with OCD permits prior to the events described above, the lack of future anticipated damage or injury resulting from compliance with this Order, the importance

of the RO units to the ongoing operation of the Facility, and other relevant considerations, OCD has determined that Navajo need not be ordered to cease discharging RO reject fluid during the period of this Order. However, this Paragraph shall not apply in the event: (A) new information not known by OCD at the time of this Order causes OCD to believe that Navajo will not be able to return to compliance pursuant to this Order; or (B) OCD determines that continued discharge of RO reject fluid in excess of 10,000 barrels per day presents an imminent and substantial endangerment of human health and the environment; or (C) Navajo fails to diligently pursue the development and implementation of a remedy to reduce RO reject fluid discharges as provided in Exhibit A to this Order.

III. ORDER

1. Compliance Schedule

a. Navajo shall take the actions and meet the schedule set forth in Exhibit A to this Order.

b. Except where otherwise modified or extended pursuant to Section IV, Paragraph 1, Navajo's obligation to comply with this Order shall be deferred only to the extent and only for the duration that the failure in compliance is caused by "force majeure." For purposes of this Order, "force majeure" is defined as an event or set of circumstances which are beyond Navajo's control and could not have been prevented by Navajo's reasonable action or due diligence, including any delay in required approvals, issuance of any necessary permits or similar items. "Force majeure" shall not apply to any failure in compliance due to increased costs or Navajo's financial inability to carry out this Order. Navajo shall promptly notify OCD of any force majeure event that has resulted in or will result in the inability of Navajo to comply with any obligation under this Order and shall provide OCD with a schedule for completing the obligations.

c. All reports, notifications and other submittals required under this Order shall be sent to OCD at the following address:

Oil Conservation Division
New Mexico Energy, Minerals & Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505
Re: WQA-OCD-CO-2015-002
email: jim.griswold@state.nm.us
carlj.chavez@state.nm.us

All such submittals shall be made electronically. Written amendment to this Order is not required for a change in the e-mail addresses specified above, and any such change in addresses may be made by e-mail.

2. Civil Penalties

a. Subject to the terms of this paragraph, Navajo will pay a penalty of $456,000 (four hundred and fifty-six thousand dollars) to resolve all of the alleged violations set forth in this Order, including all exceedances of the 10,000 barrel per day discharge limit from August 22, 2012, until the effective date of this Order. Payment of $381,000 shall be remitted to OCD no later than 30 days after the effective date of this Order. Payment of $75,000 shall be remitted to OCD no later than 60 days after the effective date of this Order unless Navajo has timely complied with discharge permit modification application requirement in Paragraph 1 of Exhibit A. If Navajo timely submits the $381,000 payment and complies with the requirement in Paragraph 1 of Exhibit A, the total penalty under this paragraph shall be reduced by $75,000. Payment must be made to "State of New Mexico – General Fund" and shall be sent to the following address:

Director, Oil Conservation Division
New Mexico Energy, Minerals & Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505
Re: WQA-OCD-CO-2015-002

b. Navajo shall pay stipulated penalties in the amounts set forth below if the following violations of this Order occur.

i. For each exceedance of the 10,000 barrel per day RO reject fluid discharge volume limit specified in Discharge Permit GW-028:

1. $1,000 per daily violation for each daily violation prior to Navajo submitting a discharge permit modification application,
2. $100 per daily violation if the daily volume is between 10,000 and 15,000 barrels, and $500 if the daily volume exceeds 15,000 barrels, for each daily violation after Navajo submits a discharge permit modification application and prior to OCD approving or denying the application.

ii. For the failure to timely conduct sampling as required in Exhibit A: $2,000 per day.

iii. For the failure to timely submit any report or notification as required in Exhibit A: $1,000 per day.

iv. For failure to record the daily discharge flow from the permanent and the temporary RO units: $1,000 per violation.

A calculation of stipulated penalties shall be made by Navajo and included in each monthly report submitted to OCD under this Order, and payment shall be due within 30 days after each monthly report submittal. Should OCD object to a given penalty calculation, OCD shall notify Navajo within five (5) business days after receipt of the monthly report, and Navajo shall make payment within ten (10) days after resolution of any such dispute. Any overpayment by Navajo shall be credited to further amounts due to OCD. Payments shall be by corporate check, certified

check, or other guaranteed negotiable instrument made payable to the "State of New Mexico – General Fund", and shall be sent to the following address:

Director, Oil Conservation Division
New Mexico Energy, Minerals & Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505
Re: WQA-OCD-CO-2015-002

IV. OTHER TERMS AND CONDITIONS

1. Termination, Modification and Extension

a. Navajo and OCD have the right to modify or terminate this Order by written instrument signed by both parties.

b. This Order will terminate on the effective date of the discharge permit modification Navajo obtains pursuant to Exhibit A. If Navajo fails to obtain a discharge permit modification increasing the discharge volume limit, this Order shall continue until Navajo removes the third temporary RO unit or completes other water management projects to reduce the total volume of RO reject water that is discharged to the land below 10,000 barrels per day.

c. OCD may grant an extension of any deadline to perform any activity required pursuant to this Order. Navajo shall submit all requests for an extension of a deadline in writing to OCD. The request shall propose a new deadline for the activity and shall include the basis for the request. OCD shall respond in writing by approving, approving in part or denying the request as soon as possible, but no later than fifteen (15) days after receipt. If OCD approves in part or denies the request, the response shall specify the reasons for OCD's actions.

2. By signing this Order, Navajo expressly:

a. acknowledges the authority of OCD to render the above Findings And Determinations, Conclusions, and Order;

b. agrees to comply with the Order;

c. waives any right, pursuant to the Act or otherwise, to a hearing either prior or subsequent to the entry of this Order or to an appeal from this Order; and

d. agrees that if it fails to comply with this Order, the Order may be enforced by suit or otherwise to the same extent and with the same effect as a final Order entered after notice and hearing in accordance with all terms of the Act.

3. Nothing in this Order relieves Navajo of its liability should its operations fail to adequately investigate and remediate contamination that poses a threat to ground water, surface water, human health, or the environment. In addition, nothing in this Order relieves Navajo of its responsibility for compliance with any federal, state, or local laws and/or regulations, including all other obligations under the Permit.

4. This Order may be executed in any number of counterparts (whether by facsimile, PDF, or original), each of which will be deemed to be an original and all of which together will constitute the same instrument.

5. This Order shall become effective on the date it is approved and signed by the Chair of the Oil Conservation Commission and the Director of the Oil Conservation Division.

Done at Santa Fe, New Mexico this 27th day of April, 2015.

ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT
OIL CONSERVATION COMMISSION
OIL CONSERVATION DIVISION

By: David Catanach

Name: David Catanach

Title: Chair, Oil Conservation Commission
Director, Oil Conservation Division

ACCEPTANCE

Navajo Refining Company, L.L.C. hereby accepts the foregoing Amendment, and agrees to all of the terms and provisions as set forth in the Amendment,

Navajo Refining Company, L.L.C.

By: ROBERT K. O'BRIEN

Name: Robert K. O'Brien

Title: ***Vice President and Refinery Manager***

Date: 4/24/2015

STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION COMMISSION
OIL CONSERVATION DIVISION

IN THE MATTER OF
Navajo Refining Company, L.L.C. **No. WQA-OCD-CO-2015-002**

Exhibit A to Agreed Compliance Order

Remedy Selection

1. No later than 30 days from the date of this Order, Navajo shall submit to OCD an application for a discharge permit modification to increase the discharge volume to account for the discharge of RO reject fluid from Navajo's operation of the third temporary RO unit. Navajo recognizes that the discharge permit modification is subject to the public notice and participation requirements of the WQCC Regulations. OCD shall review and act on the permit modification application expeditiously and shall not unreasonably delay or extend final agency action on the application.

2. Navajo has been working on a project to enhance its water management system and reduce the total volume of RO reject fluid that is discharged pursuant to the groundwater discharge permit. Options currently under consideration by Navajo include installation of a third permanent RO unit to replace the temporary RO unit as well as the installation of a secondary RO unit to reduce the total volume of RO reject fluid produced at the Facility. Navajo is also evaluating options for the underground injection of RO reject fluid. In addition, Navajo is conducting a study of background groundwater concentrations of key chemical constituents of the RO reject fluid discharged under Navajo's groundwater discharge permit in order to determine whether concentrations of those chemical constituents in the RO reject fluid exceed background levels. During the term of the Order, Navajo shall provide OCD with updates on

any new developments related to the treatment and disposal of RO reject fluid at the Facility in the monthly reports required under Paragraph 5 below.

Sampling and Analysis Requirements

3. Within five days of the date of this Order, Navajo shall sample the discharge from the third temporary RO unit and submit the sample for analysis. Navajo shall provide OCD by e-mail the final results of this sample within three business days after Navajo's receipt of the data for that sample. During the term of this Order, Navajo shall sample the discharges from a) the two permanent RO units and b) the third temporary RO unit each month on or around the first business day of each month beginning with June 1, 2015. If the effluent streams from the two permanent RO units are combined prior to actual discharge to the land, they may be sampled as a combined stream. The results of the monthly samples shall be submitted with the next monthly report. The sampling and analysis shall be conducted in accordance with the schedule and conditions set forth in Section 4.B. of Discharge Permit GW-028.

4. The Permittee shall monitor and record discharge flows on a daily basis for each RO unit individually and for all RO units together.

Reporting During the Term of the Order

5. Beginning May 15, 2015, for the month of April 2015, Navajo shall provide OCD with monthly reports detailing the actions taken by Navajo during that calendar month under Order. The monthly reports shall be due the fifteenth day of the following month and shall include the following:

a. The daily discharge flow measurements required pursuant to Paragraph 4, above;

b. The results of the monthly discharge sample results; and

c. The calculation of stipulated penalties, if any, required under Section III, Paragraph 2 of the Order.

HOLLYFRONTIER.

May 15, 2015

Submitted electronically via email to jim.griswold@state.nm.us and carlj.chavez@state.nm.us

Oil Conservation Division
New Mexico Energy, Minerals & Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: WQA-OCD-CO-2015-002
Monthly Report – April 2015 Reporting Period

Dear Sirs:

In accordance with Paragraph 5 of Exhibit A to Agreed Compliance Order No. WQA-OCD-CO-2015-002, dated April 27, 2015 (the Order), the Navajo Refining Company, L.L.C. (Navajo), Artesia, New Mexico Refinery hereby submits this monthly report to the New Mexico Energy, Minerals, and Natural Resources Department Oil Conservation Division (OCD). This letter and all attachments provided herein constitute Navajo's May 2015 monthly report under the Order.

Specifically, this report covers the April 2015 reporting period and includes the following data and information as required by Exhibit A, Paragraph 2 and Paragraph 5.a – c:

- Daily discharge flow measurements for each reverse osmosis (RO) unit individually and for all RO units together.
- Results of the monthly discharge sample results.
- Calculation of stipulated penalties, if any, required under Section III, Paragraph 2 of the Order.
- Updates on any new developments related to the treatment and disposal of RO reject fluid at the facility.

A discussion of each topic is provided below and the associated data is provided in Attachments 1 through 3.

Daily RO Reject Fluid Discharge Flow Measurements

Flow rate for the RO reject fluid is monitored for the two permanent RO units and the temporary RO unit on a daily basis. Daily discharge volumes are provided in Attachment 1.

Monthly Discharge Sample Results

Navajo collected a sample of the RO reject fluid discharge from both the permanent RO units (combined discharge) and the temporary RO unit on April 14, 2015. The analytical lab report for these samples is provided in Attachment 2.

Stipulated Penalties

Exhibit A, Paragraph 1 of the Order requires Navajo to submit the GW-028 discharge permit modification request by May 27, 2015. Navajo plans to submit this request shortly. Paragraph III.2.b.i.1 of the Order governs the calculation of stipulated penalties for exceedances of GW-028's daily RO reject fluid discharge volume limit prior to submittal of the permit modification request. Hence, this provision of the Order is applicable, and stipulated penalties are $1,000 per day for each daily RO reject fluid discharge volume limit exceedance in April.

As indicated in Paragraph III.2.a of the Order, Navajo's initial penalty payment of $381,000 covers penalties for all exceedances of the daily discharge limit for the time period from August 22, 2012 to the date of the Order, April 27, 2015. Therefore, stipulated penalties were calculated for the remaining days in April (*i.e.*, April 28 through 30).

Navajo has calculated a penalty of $2,000 for these days. The daily discharge volume exceeded the 10,000 bbls/day limit on April 28 and April 30. Calculations conducted in accordance with Paragraph III.2.b.i - iv of the Agreed Compliance Order are provided in Attachment 3.

Updates Regarding Treatment and Disposal of RO Reject Fluid

As described in the Order, Navajo is working to enhance its water management system and reduce the total volume of RO reject fluid that is discharged pursuant to its groundwater discharge permit. Options under consideration include the installation of a third permanent RO unit to replace the temporary RO unit and the installation of a secondary RO unit to reduce the total volume of RO reject fluid produced. Navajo is also evaluating options for the underground injection of RO reject fluid. In addition, Navajo is conducting a study of background groundwater concentrations of key chemical constituents of the RO reject fluid discharged under its groundwater discharge permit to determine whether concentrations of these constituents exceed background levels.

Navajo is working diligently to complete the application for the OCD Class II Order for a new injection well. Submittal of an amended application, to include the public notice documentation, is anticipated shortly. This well is anticipated for use in disposal of RO reject water once constructed.

OCD has notified Navajo that the application for a Discharge Permit for this new injection well (WDW-4) is administratively complete. Accordingly, Navajo is in the process of completing the public notice process as required by 20.6.2.3108B New Mexico Administrative Code (NMAC).

Navajo will update OCD on any new developments related to its treatment and disposal of RO reject fluid in the monthly reports required under the Order.

Navajo is committed to proactively meeting the requirements of the Order and working cooperatively with OCD. If you have any questions or comments, please contact me at 575-746-5487.

Sincerely,

Scott M. Denton
Environmental Manager

Enclosures:

Attachment 1: Daily Discharge Flow Rates
Attachment 2: Analytical Lab Report
Attachment 3: Stipulated Penalty Calculation

cc. HFC: D. McWatters, R. O'Brien, M. Holder
OCD: A. Marks, B. Brancard

Attachment 1
Daily Discharge Flow Rates

Daily RO Reject Discharge Flow Rate Measurements and Calculated Daily Discharge

	Permanent RO Units				Temporary Unit		Daily Discharge Volume
	Metered Data		Combined RO Reject Discharge (Calculated)		Total RO Reject Discharge	Total RO Reject Discharge	
	GPM	GPM	GPM	BBLS/DAY	GPM	BBLS/DAY	BBLS
	SOUTH	NORTH					
4/1/2015	117.9	84.0	201.9	6924	65	2223	9147
4/2/2015	116.7	104.4	221.1	7579	67	2282	9861
4/3/2015	114.7	100.9	215.5	7389	70	2383	9772
4/4/2015	114.5	104.1	218.6	7497	69	2370	9867
4/5/2015	115.0	104.1	219.2	7514	70	2402	9916
4/6/2015	115.7	105.8	221.6	7597	73	2500	10097
4/7/2015	115.8	102.7	218.5	7491	78	2668	10159
4/8/2015	123.5	103.4	227.0	7782	66	2266	10048
4/9/2015	125.3	101.5	226.8	7776	67	2297	10073
4/10/2015	125.6	103.4	229.0	7850	79	2706	10556
4/11/2015	151.7	113.1	264.8	9078	66	2273	11351
4/12/2015	198.1	108.8	306.9	10521	62	2119	12640
4/13/2015	137	106	243	8337	62	2134	10471
4/14/2015	134	109	242	8309	54	1845	10154
4/15/2015	129	109	239	8180	60	2065	10245
4/16/2015	133	103	236	8099	59	2030	10129
4/17/2015	138	110	248	8499	76	2598	11097
4/18/2015	131	106	237	8132	127	4369	12501
4/19/2015	123	103	226	7744	129	4412	12156
4/20/2015	126	110	236	8097	130	4441	12538
4/21/2015	123	103	226	7744	130	4471	12215
4/22/2015	137	111	248	8518	58	1996	10514
4/23/2015	138	103	241	8256	125	4289	12545
4/24/2015	122	110	232	7943	136	4662	12605
4/25/2015	124	110	234	8010	135	4629	12639
4/26/2015	120	106	226	7762	139	4763	12525
4/27/2015	126	106	232	7956	140	4814	12770
4/28/2015	123	107	230	7895	142	4883	12778
4/29/2015	122	102	224	7695	60	2063	9758
4/30/2015	124	102	226	7752	79	2706	10458

Attachment 2
Analytical Lab Report

ANALYTICAL REPORT

April 16, 2015

ARCADIS US - TX

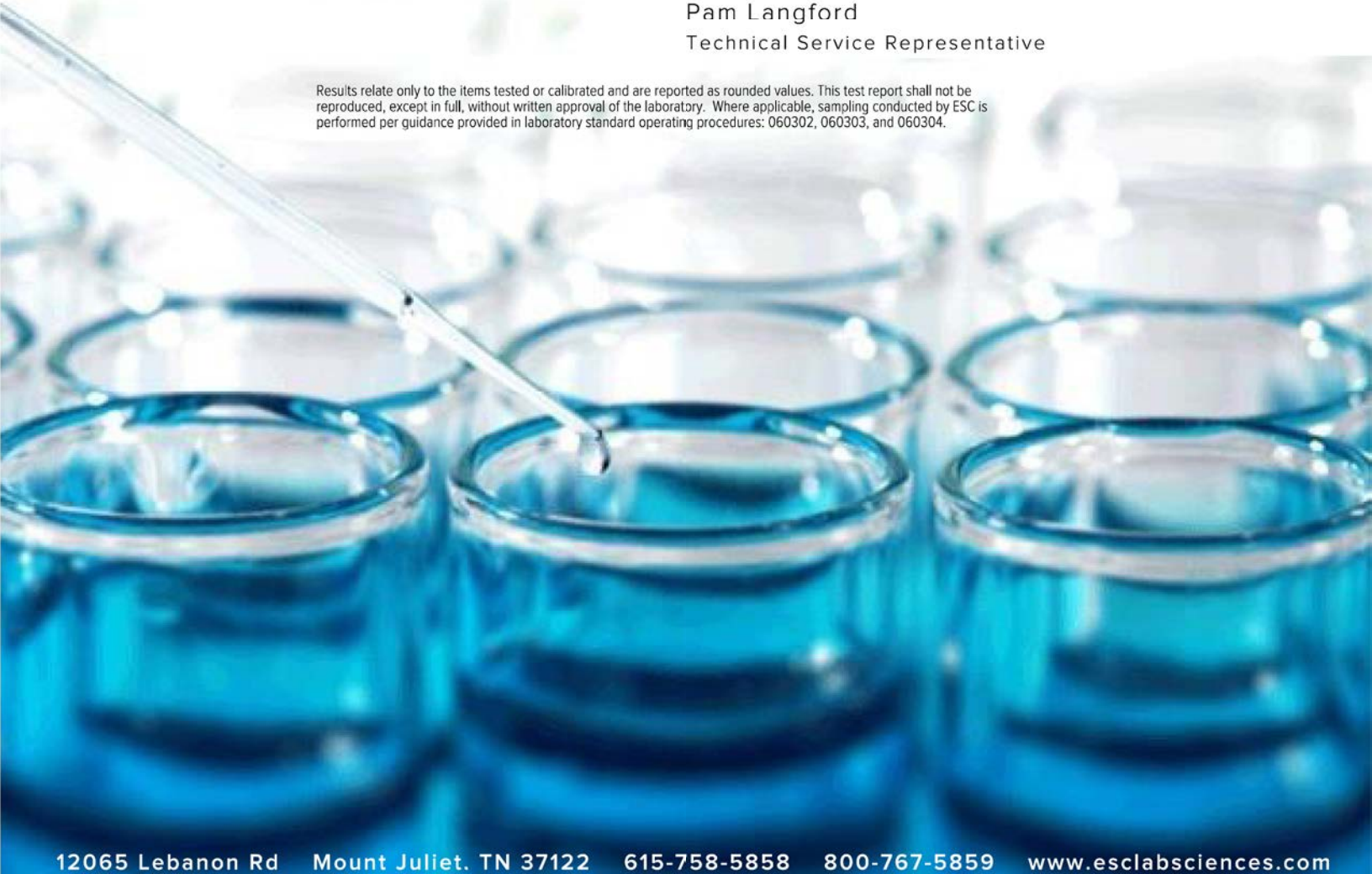
Sample Delivery Group:	L759281
Samples Received:	04/15/2015
Project Number:	TX000836.0008.15009
Description:	Reject
Report To:	Project Manager 2929 Briarpark Dr., Suite 300 Houston, TX 77042

Entire Report Reviewed By:

Pamela A. Langford

Pam Langford

Pam Langford
Technical Service Representative



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REGULAR UNIT SOUTH FIELD RD REJECT L759281-01 GW

Collected by: Scott Ude
Collected date/time: 04/14/15 13:30
Received date/time: 04/15/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG782480	1	04/16/15 17:17	04/17/15 15:25	MF
Mercury by Method 7470A	WG782318	1	04/20/15 15:24	04/21/15 09:32	ESC
Mercury by Method 7470A	WG784623	1	04/25/15 15:21	04/27/15 08:39	ESC
Metals (ICPMS) by Method 6020	WG783437	10	04/21/15 20:13	04/23/15 13:38	JD
Metals (ICPMS) by Method 6020	WG783437	5	04/21/15 20:13	04/23/15 12:53	JD
Polychlorinated Biphenyls (GC) by Method 8082	WG782838	1	04/17/15 15:34	04/20/15 10:42	EGR
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG782361	1	04/16/15 16:08	04/17/15 05:02	ADF
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG782361	1	04/16/15 16:08	04/17/15 17:00	KMF
Semi-Volatile Organic Compounds (GC) by Method 8015	WG782628	1	04/16/15 08:43	04/16/15 17:17	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG782393	1	04/16/15 21:05	04/16/15 21:05	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782439	1	04/18/15 02:24	04/18/15 02:24	KLO
Wet Chemistry by Method 353.2	WG783651	1	04/24/15 12:35	04/24/15 12:35	JAL
Wet Chemistry by Method 9012B	WG783058	1	04/18/15 12:19	04/21/15 09:48	MCG
Wet Chemistry by Method 9056MOD	WG782493	1	04/20/15 19:21	04/20/15 19:21	NJM
Wet Chemistry by Method 9056MOD	WG782493	50	04/20/15 22:25	04/20/15 22:25	NJM

TEMPORARY UNIT SOUTH FIELD RD REJECT L759281-02 GW

Collected by: Scott Ude
Collected date/time: 04/14/15 13:15
Received date/time: 04/15/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG782480	1	04/16/15 17:17	04/17/15 15:28	MF
Mercury by Method 7470A	WG782318	1	04/20/15 15:24	04/21/15 09:45	ESC
Mercury by Method 7470A	WG784623	1	04/25/15 15:21	04/27/15 08:42	ESC
Metals (ICPMS) by Method 6020	WG783437	10	04/21/15 20:13	04/23/15 13:41	JD
Metals (ICPMS) by Method 6020	WG783437	5	04/21/15 20:13	04/23/15 13:02	JD
Polychlorinated Biphenyls (GC) by Method 8082	WG782838	1	04/17/15 15:34	04/20/15 10:55	EGR
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG782361	1	04/16/15 16:08	04/17/15 05:25	ADF
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG782361	1	04/16/15 16:08	04/17/15 17:17	KMF
Semi-Volatile Organic Compounds (GC) by Method 8015	WG782628	1	04/16/15 08:43	04/16/15 17:34	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG782393	1	04/16/15 21:27	04/16/15 21:27	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782439	1	04/18/15 02:46	04/18/15 02:46	KLO
Wet Chemistry by Method 353.2	WG783651	1	04/24/15 12:39	04/24/15 12:39	JAL
Wet Chemistry by Method 9012B	WG783058	1	04/18/15 12:19	04/21/15 09:49	MCG
Wet Chemistry by Method 9056MOD	WG782493	1	04/20/15 19:36	04/20/15 19:36	NJM
Wet Chemistry by Method 9056MOD	WG782493	50	04/20/15 22:40	04/20/15 22:40	NJM

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Pamela A. Langford

Pam Langford

Pam Langford
Technical Service Representative

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	2950000		2800	10000	1	04/17/2015 15:25	WG782480

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	2140		20.0	100	1	04/24/2015 12:35	WG783651

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cyanide	U		1.80	5.00	1	04/21/2015 09:48	WG783058

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	52900		52.0	1000	1	04/20/2015 19:21	WG782493
Fluoride	3610		9.90	100	1	04/20/2015 19:21	WG782493
Sulfate	1530000		3900	250000	50	04/20/2015 22:25	WG782493

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.0490	0.200	1	04/27/2015 08:39	WG784623
Mercury,Dissolved	U		0.0490	0.200	1	04/21/2015 09:32	WG782318

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Aluminum,Dissolved	16.6	J	10.0	500	5	04/23/2015 12:53	WG783437
Arsenic,Dissolved	U		1.20	10.0	5	04/23/2015 12:53	WG783437
Barium,Dissolved	69.6		1.80	25.0	5	04/23/2015 12:53	WG783437
Boron,Dissolved	116		7.50	100	5	04/23/2015 12:53	WG783437
Cadmium,Dissolved	U		0.800	5.00	5	04/23/2015 12:53	WG783437
Calcium,Dissolved	685000		460	10000	10	04/23/2015 13:38	WG783437
Chromium,Dissolved	U		2.70	10.0	5	04/23/2015 12:53	WG783437
Copper,Dissolved	88.7	J6 O1	2.60	25.0	5	04/23/2015 12:53	WG783437
Cobalt,Dissolved	U		1.30	10.0	5	04/23/2015 12:53	WG783437
Iron,Dissolved	U		75.0	500	5	04/23/2015 12:53	WG783437
Lead,Dissolved	U		1.20	10.0	5	04/23/2015 12:53	WG783437
Manganese,Dissolved	2.44	J	1.20	25.0	5	04/23/2015 12:53	WG783437
Molybdenum,Dissolved	12.1	J	0.700	25.0	5	04/23/2015 12:53	WG783437
Nickel,Dissolved	17.5		1.80	10.0	5	04/23/2015 12:53	WG783437
Potassium,Dissolved	5480		180	5000	5	04/23/2015 12:53	WG783437
Selenium,Dissolved	8.08	J	1.90	10.0	5	04/23/2015 12:53	WG783437
Silver,Dissolved	U		1.60	10.0	5	04/23/2015 12:53	WG783437
Sodium,Dissolved	60000	V	550	5000	5	04/23/2015 12:53	WG783437
Uranium,Dissolved	5.46	J	1.60	50.0	5	04/23/2015 12:53	WG783437
Zinc,Dissolved	16.1	J	13.0	125	5	04/23/2015 12:53	WG783437

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/16/2015 21:05	WG782393

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) α,α,α-Trifluorotoluene(FID)	*91.3*			*62.0-128*		*04/16/2015 21:05*	WG782393

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/18/2015 02:24	WG782439
Benzene	U		0.330	1.00	1	04/18/2015 02:24	WG782439
Bromodichloromethane	U		0.380	1.00	1	04/18/2015 02:24	WG782439
Bromoform	U	J3	0.470	1.00	1	04/18/2015 02:24	WG782439
Bromomethane	U		0.870	5.00	1	04/18/2015 02:24	WG782439
n-Butylbenzene	0.438	J	0.360	1.00	1	04/18/2015 02:24	WG782439
sec-Butylbenzene	U		0.360	1.00	1	04/18/2015 02:24	WG782439
Carbon disulfide	U		0.280	1.00	1	04/18/2015 02:24	WG782439
Carbon tetrachloride	U		0.380	1.00	1	04/18/2015 02:24	WG782439
Chlorobenzene	U		0.350	1.00	1	04/18/2015 02:24	WG782439
Chlorodibromomethane	U		0.330	1.00	1	04/18/2015 02:24	WG782439
Chloroethane	U		0.450	5.00	1	04/18/2015 02:24	WG782439
Chloroform	U		0.320	5.00	1	04/18/2015 02:24	WG782439
Chloromethane	U		0.280	2.50	1	04/18/2015 02:24	WG782439
1,2-Dibromoethane	U	J3	0.380	1.00	1	04/18/2015 02:24	WG782439
1,1-Dichloroethane	U		0.260	1.00	1	04/18/2015 02:24	WG782439
1,2-Dichloroethane	U		0.360	1.00	1	04/18/2015 02:24	WG782439
1,1-Dichloroethene	U		0.400	1.00	1	04/18/2015 02:24	WG782439
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/18/2015 02:24	WG782439
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/18/2015 02:24	WG782439
1,2-Dichloropropane	U		0.310	1.00	1	04/18/2015 02:24	WG782439
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/18/2015 02:24	WG782439
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/18/2015 02:24	WG782439
Ethylbenzene	U		0.380	1.00	1	04/18/2015 02:24	WG782439
Isopropylbenzene	U		0.330	1.00	1	04/18/2015 02:24	WG782439
p-Isopropyltoluene	U		0.350	1.00	1	04/18/2015 02:24	WG782439
2-Butanone (MEK)	U		3.90	10.0	1	04/18/2015 02:24	WG782439
2-Hexanone	U		3.80	10.0	1	04/18/2015 02:24	WG782439
Methylene Chloride	U		1.00	5.00	1	04/18/2015 02:24	WG782439
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/18/2015 02:24	WG782439
Methyl tert-butyl ether	U		0.370	1.00	1	04/18/2015 02:24	WG782439
Naphthalene	U		1.00	5.00	1	04/18/2015 02:24	WG782439
n-Propylbenzene	U		0.350	1.00	1	04/18/2015 02:24	WG782439
Styrene	U	J3	0.310	1.00	1	04/18/2015 02:24	WG782439
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/18/2015 02:24	WG782439
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/18/2015 02:24	WG782439
Tetrachloroethene	U		0.370	1.00	1	04/18/2015 02:24	WG782439
Toluene	U		0.780	5.00	1	04/18/2015 02:24	WG782439
1,1,1-Trichloroethane	U		0.319	1.00	1	04/18/2015 02:24	WG782439
1,1,2-Trichloroethane	U		0.380	1.00	1	04/18/2015 02:24	WG782439
Trichloroethene	U		0.400	1.00	1	04/18/2015 02:24	WG782439
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/18/2015 02:24	WG782439
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/18/2015 02:24	WG782439
Vinyl chloride	U		0.260	1.00	1	04/18/2015 02:24	WG782439
o-Xylene	U		0.340	1.00	1	04/18/2015 02:24	WG782439
m&p-Xylene	U		0.720	1.00	1	04/18/2015 02:24	WG782439
Xylenes, Total	U		1.10	3.00	1	04/18/2015 02:24	WG782439
(S) Toluene-d8	*102*			*88.5-111*		*04/18/2015 02:24*	WG782439
(S) Dibromofluoromethane	*94.8*			*78.3-121*		*04/18/2015 02:24*	WG782439
(S) 4-Bromofluorobenzene	*104*			*71.0-126*		*04/18/2015 02:24*	WG782439

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
C10-C28 Diesel Range	U		22.0	100	1	04/16/2015 17:17	WG782628
C28-C40 Oil Range	U		12.0	100	1	04/16/2015 17:17	WG782628
(S) o-Terphenyl	*115*			*50.0-150*		*04/16/2015 17:17*	WG782628

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
PCB 1016	U		0.100	0.500	1	04/20/2015 10:42	WG782838
PCB 1221	U		0.0730	0.500	1	04/20/2015 10:42	WG782838
PCB 1232	U		0.0420	0.500	1	04/20/2015 10:42	WG782838
PCB 1242	U		0.0470	0.500	1	04/20/2015 10:42	WG782838
PCB 1248	U		0.0860	0.500	1	04/20/2015 10:42	WG782838
PCB 1254	U		0.0470	0.500	1	04/20/2015 10:42	WG782838
PCB 1260	U		0.120	0.500	1	04/20/2015 10:42	WG782838
(S) Decachlorobiphenyl	*85.1*			*10.0-156*		*04/20/2015 10:42*	WG782838
(S) Tetrachloro-m-xylene	*82.3*			*13.9-137*		*04/20/2015 10:42*	WG782838

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acenaphthene	U		0.320	1.00	1	04/17/2015 05:02	WG782361
Acenaphthylene	U		0.310	1.00	1	04/17/2015 05:02	WG782361
Acetophenone	U		2.70	10.0	1	04/17/2015 05:02	WG782361
Anthracene	U		0.290	1.00	1	04/17/2015 05:02	WG782361
Atrazine	U		1.50	10.0	1	04/17/2015 05:02	WG782361
Benzaldehyde	U		1.40	10.0	1	04/17/2015 05:02	WG782361
Benzo(a)anthracene	U		0.110	1.00	1	04/17/2015 05:02	WG782361
Benzo(b)fluoranthene	U		0.0900	1.00	1	04/17/2015 05:02	WG782361
Benzo(k)fluoranthene	U		0.360	1.00	1	04/17/2015 05:02	WG782361
Benzo(g,h,i)perylene	U		0.160	1.00	1	04/17/2015 05:02	WG782361
Benzo(a)pyrene	U		0.340	1.00	1	04/17/2015 05:02	WG782361
Bis(2-chlorethoxy)methane	U		0.330	10.0	1	04/17/2015 05:02	WG782361
Bis(2-chloroisopropyl)ether	U		0.440	10.0	1	04/17/2015 05:02	WG782361
Biphenyl	U		0.210	10.0	1	04/17/2015 05:02	WG782361
Bis(2-chloroethyl)ether	U		1.60	10.0	1	04/17/2015 05:02	WG782361
4-Bromophenyl-phenylether	U		0.340	10.0	1	04/17/2015 05:02	WG782361
2-Chloronaphthalene	U		0.330	1.00	1	04/17/2015 05:02	WG782361
4-Chlorophenyl-phenylether	U		0.300	10.0	1	04/17/2015 05:02	WG782361
Chrysene	U		0.330	1.00	1	04/17/2015 05:02	WG782361
Caprolactam	0.894	J	0.580	10.0	1	04/17/2015 05:02	WG782361
Carbazole	U		0.160	10.0	1	04/17/2015 05:02	WG782361
Dibenz(a,h)anthracene	U		0.280	1.00	1	04/17/2015 05:02	WG782361
3,3-Dichlorobenzidine	U		2.00	10.0	1	04/17/2015 05:02	WG782361
2,4-Dinitrotoluene	U		1.60	10.0	1	04/17/2015 05:02	WG782361
2,6-Dinitrotoluene	U		0.280	10.0	1	04/17/2015 05:02	WG782361
Fluoranthene	U		0.310	1.00	1	04/17/2015 05:02	WG782361
Fluorene	U		0.320	1.00	1	04/17/2015 05:02	WG782361
Hexachlorobenzene	U		0.340	1.00	1	04/17/2015 05:02	WG782361
Hexachloro-1,3-butadiene	U		0.330	10.0	1	04/17/2015 05:02	WG782361
Hexachlorocyclopentadiene	U		2.30	10.0	1	04/17/2015 05:02	WG782361
Hexachloroethane	U		0.360	10.0	1	04/17/2015 05:02	WG782361
Indeno(1,2,3-cd)pyrene	U		0.280	1.00	1	04/17/2015 05:02	WG782361
Isophorone	U		0.270	10.0	1	04/17/2015 05:02	WG782361
Naphthalene	U		0.370	1.00	1	04/17/2015 05:02	WG782361
Nitrobenzene	U		0.370	10.0	1	04/17/2015 05:02	WG782361

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
n-Nitrosodiphenylamine	U		0.300	10.0	1	04/17/2015 05:02	WG782361
n-Nitrosodi-n-propylamine	U		0.400	10.0	1	04/17/2015 05:02	WG782361
Phenanthrene	U		0.370	1.00	1	04/17/2015 05:02	WG782361
Benzylbutyl phthalate	U		0.280	3.00	1	04/17/2015 05:02	WG782361
Bis(2-Ethylhexyl)phthalate	2.59	J	0.710	3.00	1	04/17/2015 05:02	WG782361
Di-n-butyl phthalate	2.33	J	0.270	3.00	1	04/17/2015 05:02	WG782361
Diethyl phthalate	U		0.280	3.00	1	04/17/2015 05:02	WG782361
Dimethyl phthalate	0.343	J	0.280	3.00	1	04/17/2015 05:02	WG782361
Di-n-octyl phthalate	0.447	J	0.280	3.00	1	04/17/2015 05:02	WG782361
Pyrene	U		0.330	1.00	1	04/17/2015 05:02	WG782361
1-Methylnaphthalene	U		0.220	1.00	1	04/17/2015 05:02	WG782361
4-Chloroaniline	U		0.380	10.0	1	04/17/2015 05:02	WG782361
4-Chloro-3-methylphenol	U		0.260	10.0	1	04/17/2015 05:02	WG782361
2-Chlorophenol	U		0.280	10.0	1	04/17/2015 05:02	WG782361
Dibenzofuran	U		0.340	10.0	1	04/17/2015 05:02	WG782361
2,4-Dichlorophenol	U		0.280	10.0	1	04/17/2015 05:02	WG782361
2,4-Dimethylphenol	U		0.620	10.0	1	04/17/2015 05:02	WG782361
4,6-Dinitro-2-methylphenol	U		2.60	10.0	1	04/17/2015 05:02	WG782361
2,4-Dinitrophenol	U		3.20	10.0	1	04/17/2015 05:02	WG782361
2-Methylnaphthalene	U		0.310	1.00	1	04/17/2015 05:02	WG782361
2-Methylphenol	U		0.310	10.0	1	04/17/2015 05:02	WG782361
3&4-Methyl Phenol	U		0.270	10.0	1	04/17/2015 05:02	WG782361
2-Nitroaniline	U		1.90	10.0	1	04/17/2015 05:02	WG782361
3-Nitroaniline	U		0.310	10.0	1	04/17/2015 05:02	WG782361
4-Nitroaniline	U		0.350	10.0	1	04/17/2015 05:02	WG782361
2-Nitrophenol	U		0.320	10.0	1	04/17/2015 05:02	WG782361
4-Nitrophenol	U		2.00	10.0	1	04/17/2015 05:02	WG782361
Pentachlorophenol	U		0.310	1.00	1	04/17/2015 05:02	WG782361
Phenol	U		0.330	10.0	1	04/17/2015 05:02	WG782361
2,4,6-Trichlorophenol	U		0.300	10.0	1	04/17/2015 05:02	WG782361
2,4,5-Trichlorophenol	U		0.240	10.0	1	04/17/2015 05:02	WG782361
1,3,5-Trinitrobenzene	U		1.30	10.0	1	04/17/2015 17:00	WG782361
(S) 2-Fluorophenol	*57.6*			*10.0-77.9*		*04/17/2015 05:02*	WG782361
(S) Phenol-d5	*44.0*			*5.00-70.1*		*04/17/2015 05:02*	WG782361
(S) Nitrobenzene-d5	*74.1*			*21.8-123*		*04/17/2015 05:02*	WG782361
(S) 2-Fluorobiphenyl	*81.3*			*29.5-131*		*04/17/2015 05:02*	WG782361
(S) 2,4,6-Tribromophenol	*75.0*			*11.2-130*		*04/17/2015 05:02*	WG782361
(S) p-Terphenyl-d14	*77.5*			*29.3-137*		*04/17/2015 05:02*	WG782361

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	3590000		2800	10000	1	04/17/2015 15:28	WG782480

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	2470		20.0	100	1	04/24/2015 12:39	WG783651

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cyanide	U		1.80	5.00	1	04/21/2015 09:49	WG783058

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	58900		52.0	1000	1	04/20/2015 19:36	WG782493
Fluoride	3880		9.90	100	1	04/20/2015 19:36	WG782493
Sulfate	1830000		3900	250000	50	04/20/2015 22:40	WG782493

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.0490	0.200	1	04/27/2015 08:42	WG784623
Mercury,Dissolved	U		0.0490	0.200	1	04/21/2015 09:45	WG782318

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Aluminum,Dissolved	10.9	J	10.0	500	5	04/23/2015 13:02	WG783437
Arsenic,Dissolved	1.52	J	1.20	10.0	5	04/23/2015 13:02	WG783437
Barium,Dissolved	72.2		1.80	25.0	5	04/23/2015 13:02	WG783437
Boron,Dissolved	123		7.50	100	5	04/23/2015 13:02	WG783437
Cadmium,Dissolved	U		0.800	5.00	5	04/23/2015 13:02	WG783437
Calcium,Dissolved	806000		460	10000	10	04/23/2015 13:41	WG783437
Chromium,Dissolved	U		2.70	10.0	5	04/23/2015 13:02	WG783437
Copper,Dissolved	U		2.60	25.0	5	04/23/2015 13:02	WG783437
Cobalt,Dissolved	U		1.30	10.0	5	04/23/2015 13:02	WG783437
Iron,Dissolved	U		75.0	500	5	04/23/2015 13:02	WG783437
Lead,Dissolved	U		1.20	10.0	5	04/23/2015 13:02	WG783437
Manganese,Dissolved	5.10	J	1.20	25.0	5	04/23/2015 13:02	WG783437
Molybdenum,Dissolved	13.0	J	0.700	25.0	5	04/23/2015 13:02	WG783437
Nickel,Dissolved	U		1.80	10.0	5	04/23/2015 13:02	WG783437
Potassium,Dissolved	6600		180	5000	5	04/23/2015 13:02	WG783437
Selenium,Dissolved	8.82	J	1.90	10.0	5	04/23/2015 13:02	WG783437
Silver,Dissolved	U		1.60	10.0	5	04/23/2015 13:02	WG783437
Sodium,Dissolved	70300		550	5000	5	04/23/2015 13:02	WG783437
Uranium,Dissolved	6.09	J	1.60	50.0	5	04/23/2015 13:02	WG783437
Zinc,Dissolved	U		13.0	125	5	04/23/2015 13:02	WG783437

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/16/2015 21:27	WG782393

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) α,α,α-Trifluorotoluene(FID)	*91.1*			*62.0-128*		*04/16/2015 21:27*	WG782393

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/18/2015 02:46	WG782439
Benzene	U		0.330	1.00	1	04/18/2015 02:46	WG782439
Bromodichloromethane	U		0.380	1.00	1	04/18/2015 02:46	WG782439
Bromoform	U		0.470	1.00	1	04/18/2015 02:46	WG782439
Bromomethane	U		0.870	5.00	1	04/18/2015 02:46	WG782439
n-Butylbenzene	U		0.360	1.00	1	04/18/2015 02:46	WG782439
sec-Butylbenzene	U		0.360	1.00	1	04/18/2015 02:46	WG782439
Carbon disulfide	U		0.280	1.00	1	04/18/2015 02:46	WG782439
Carbon tetrachloride	U		0.380	1.00	1	04/18/2015 02:46	WG782439
Chlorobenzene	U		0.350	1.00	1	04/18/2015 02:46	WG782439
Chlorodibromomethane	U		0.330	1.00	1	04/18/2015 02:46	WG782439
Chloroethane	U		0.450	5.00	1	04/18/2015 02:46	WG782439
Chloroform	U		0.320	5.00	1	04/18/2015 02:46	WG782439
Chloromethane	U		0.280	2.50	1	04/18/2015 02:46	WG782439
1,2-Dibromoethane	U		0.380	1.00	1	04/18/2015 02:46	WG782439
1,1-Dichloroethane	U		0.260	1.00	1	04/18/2015 02:46	WG782439
1,2-Dichloroethane	U		0.360	1.00	1	04/18/2015 02:46	WG782439
1,1-Dichloroethene	U		0.400	1.00	1	04/18/2015 02:46	WG782439
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/18/2015 02:46	WG782439
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/18/2015 02:46	WG782439
1,2-Dichloropropane	U		0.310	1.00	1	04/18/2015 02:46	WG782439
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/18/2015 02:46	WG782439
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/18/2015 02:46	WG782439
Ethylbenzene	U		0.380	1.00	1	04/18/2015 02:46	WG782439
Isopropylbenzene	U		0.330	1.00	1	04/18/2015 02:46	WG782439
p-Isopropyltoluene	U		0.350	1.00	1	04/18/2015 02:46	WG782439
2-Butanone (MEK)	U		3.90	10.0	1	04/18/2015 02:46	WG782439
2-Hexanone	U		3.80	10.0	1	04/18/2015 02:46	WG782439
Methylene Chloride	U		1.00	5.00	1	04/18/2015 02:46	WG782439
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/18/2015 02:46	WG782439
Methyl tert-butyl ether	U		0.370	1.00	1	04/18/2015 02:46	WG782439
Naphthalene	U		1.00	5.00	1	04/18/2015 02:46	WG782439
n-Propylbenzene	U		0.350	1.00	1	04/18/2015 02:46	WG782439
Styrene	U		0.310	1.00	1	04/18/2015 02:46	WG782439
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/18/2015 02:46	WG782439
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/18/2015 02:46	WG782439
Tetrachloroethene	U		0.370	1.00	1	04/18/2015 02:46	WG782439
Toluene	U		0.780	5.00	1	04/18/2015 02:46	WG782439
1,1,1-Trichloroethane	U		0.319	1.00	1	04/18/2015 02:46	WG782439
1,1,2-Trichloroethane	U		0.380	1.00	1	04/18/2015 02:46	WG782439
Trichloroethene	U		0.400	1.00	1	04/18/2015 02:46	WG782439
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/18/2015 02:46	WG782439
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/18/2015 02:46	WG782439
Vinyl chloride	U		0.260	1.00	1	04/18/2015 02:46	WG782439
o-Xylene	U		0.340	1.00	1	04/18/2015 02:46	WG782439
m&p-Xylene	U		0.720	1.00	1	04/18/2015 02:46	WG782439
Xylenes, Total	U		1.10	3.00	1	04/18/2015 02:46	WG782439
(S) Toluene-d8	*103*			*88.5-111*		*04/18/2015 02:46*	WG782439
(S) Dibromofluoromethane	*93.2*			*78.3-121*		*04/18/2015 02:46*	WG782439
(S) 4-Bromofluorobenzene	*106*			*71.0-126*		*04/18/2015 02:46*	WG782439

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
C10-C28 Diesel Range	U		22.0	100	1	04/16/2015 17:34	WG782628
C28-C40 Oil Range	U		12.0	100	1	04/16/2015 17:34	WG782628
(S) o-Terphenyl	*116*			*50.0-150*		*04/16/2015 17:34*	WG782628

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
PCB 1016	U		0.100	0.500	1	04/20/2015 10:55	WG782838
PCB 1221	U		0.0730	0.500	1	04/20/2015 10:55	WG782838
PCB 1232	U		0.0420	0.500	1	04/20/2015 10:55	WG782838
PCB 1242	U		0.0470	0.500	1	04/20/2015 10:55	WG782838
PCB 1248	U		0.0860	0.500	1	04/20/2015 10:55	WG782838
PCB 1254	U		0.0470	0.500	1	04/20/2015 10:55	WG782838
PCB 1260	U		0.120	0.500	1	04/20/2015 10:55	WG782838
(S) Decachlorobiphenyl	*85.8*			*10.0-156*		*04/20/2015 10:55*	WG782838
(S) Tetrachloro-m-xylene	*85.6*			*13.9-137*		*04/20/2015 10:55*	WG782838

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acenaphthene	U		0.320	1.00	1	04/17/2015 05:25	WG782361
Acenaphthylene	U		0.310	1.00	1	04/17/2015 05:25	WG782361
Acetophenone	U		2.70	10.0	1	04/17/2015 05:25	WG782361
Anthracene	U		0.290	1.00	1	04/17/2015 05:25	WG782361
Atrazine	U		1.50	10.0	1	04/17/2015 05:25	WG782361
Benzaldehyde	U		1.40	10.0	1	04/17/2015 05:25	WG782361
Benzo(a)anthracene	U		0.110	1.00	1	04/17/2015 05:25	WG782361
Benzo(b)fluoranthene	U		0.0900	1.00	1	04/17/2015 05:25	WG782361
Benzo(k)fluoranthene	U		0.360	1.00	1	04/17/2015 05:25	WG782361
Benzo(g,h,i)perylene	U		0.160	1.00	1	04/17/2015 05:25	WG782361
Benzo(a)pyrene	U		0.340	1.00	1	04/17/2015 05:25	WG782361
Bis(2-chlorethoxy)methane	U		0.330	10.0	1	04/17/2015 05:25	WG782361
Bis(2-chloroisopropyl)ether	U		0.440	10.0	1	04/17/2015 05:25	WG782361
Biphenyl	U		0.210	10.0	1	04/17/2015 05:25	WG782361
Bis(2-chloroethyl)ether	U		1.60	10.0	1	04/17/2015 05:25	WG782361
4-Bromophenyl-phenylether	U		0.340	10.0	1	04/17/2015 05:25	WG782361
2-Chloronaphthalene	U		0.330	1.00	1	04/17/2015 05:25	WG782361
4-Chlorophenyl-phenylether	U		0.300	10.0	1	04/17/2015 05:25	WG782361
Chrysene	U		0.330	1.00	1	04/17/2015 05:25	WG782361
Caprolactam	U		0.580	10.0	1	04/17/2015 05:25	WG782361
Carbazole	U		0.160	10.0	1	04/17/2015 05:25	WG782361
Dibenz(a,h)anthracene	U		0.280	1.00	1	04/17/2015 05:25	WG782361
3,3-Dichlorobenzidine	U		2.00	10.0	1	04/17/2015 05:25	WG782361
2,4-Dinitrotoluene	U		1.60	10.0	1	04/17/2015 05:25	WG782361
2,6-Dinitrotoluene	U		0.280	10.0	1	04/17/2015 05:25	WG782361
Fluoranthene	U		0.310	1.00	1	04/17/2015 05:25	WG782361
Fluorene	U		0.320	1.00	1	04/17/2015 05:25	WG782361
Hexachlorobenzene	U		0.340	1.00	1	04/17/2015 05:25	WG782361
Hexachloro-1,3-butadiene	U		0.330	10.0	1	04/17/2015 05:25	WG782361
Hexachlorocyclopentadiene	U		2.30	10.0	1	04/17/2015 05:25	WG782361
Hexachloroethane	U		0.360	10.0	1	04/17/2015 05:25	WG782361
Indeno(1,2,3-cd)pyrene	U		0.280	1.00	1	04/17/2015 05:25	WG782361
Isophorone	U		0.270	10.0	1	04/17/2015 05:25	WG782361
Naphthalene	U		0.370	1.00	1	04/17/2015 05:25	WG782361
Nitrobenzene	U		0.370	10.0	1	04/17/2015 05:25	WG782361

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
n-Nitrosodiphenylamine	U		0.300	10.0	1	04/17/2015 05:25	WG782361
n-Nitrosodi-n-propylamine	U		0.400	10.0	1	04/17/2015 05:25	WG782361
Phenanthrene	U		0.370	1.00	1	04/17/2015 05:25	WG782361
Benzylbutyl phthalate	U		0.280	3.00	1	04/17/2015 05:25	WG782361
Bis(2-Ethylhexyl)phthalate	1.60	J	0.710	3.00	1	04/17/2015 05:25	WG782361
Di-n-butyl phthalate	1.19	J	0.270	3.00	1	04/17/2015 05:25	WG782361
Diethyl phthalate	U		0.280	3.00	1	04/17/2015 05:25	WG782361
Dimethyl phthalate	U		0.280	3.00	1	04/17/2015 05:25	WG782361
Di-n-octyl phthalate	0.484	J	0.280	3.00	1	04/17/2015 05:25	WG782361
Pyrene	U		0.330	1.00	1	04/17/2015 05:25	WG782361
1-Methylnaphthalene	U		0.220	1.00	1	04/17/2015 05:25	WG782361
4-Chloroaniline	U		0.380	10.0	1	04/17/2015 05:25	WG782361
4-Chloro-3-methylphenol	U		0.260	10.0	1	04/17/2015 05:25	WG782361
2-Chlorophenol	U		0.280	10.0	1	04/17/2015 05:25	WG782361
Dibenzofuran	U		0.340	10.0	1	04/17/2015 05:25	WG782361
2,4-Dichlorophenol	U		0.280	10.0	1	04/17/2015 05:25	WG782361
2,4-Dimethylphenol	U		0.620	10.0	1	04/17/2015 05:25	WG782361
4,6-Dinitro-2-methylphenol	U		2.60	10.0	1	04/17/2015 05:25	WG782361
2,4-Dinitrophenol	U		3.20	10.0	1	04/17/2015 05:25	WG782361
2-Methylnaphthalene	U		0.310	1.00	1	04/17/2015 05:25	WG782361
2-Methylphenol	U		0.310	10.0	1	04/17/2015 05:25	WG782361
3&4-Methyl Phenol	U		0.270	10.0	1	04/17/2015 05:25	WG782361
2-Nitroaniline	U		1.90	10.0	1	04/17/2015 05:25	WG782361
3-Nitroaniline	U		0.310	10.0	1	04/17/2015 05:25	WG782361
4-Nitroaniline	U		0.350	10.0	1	04/17/2015 05:25	WG782361
2-Nitrophenol	U		0.320	10.0	1	04/17/2015 05:25	WG782361
4-Nitrophenol	U		2.00	10.0	1	04/17/2015 05:25	WG782361
Pentachlorophenol	U		0.310	1.00	1	04/17/2015 05:25	WG782361
Phenol	U		0.330	10.0	1	04/17/2015 05:25	WG782361
2,4,6-Trichlorophenol	U		0.300	10.0	1	04/17/2015 05:25	WG782361
2,4,5-Trichlorophenol	U		0.240	10.0	1	04/17/2015 05:25	WG782361
1,3,5-Trinitrobenzene	U		1.30	10.0	1	04/17/2015 17:17	WG782361
(S) 2-Fluorophenol	*58.6*			*10.0-77.9*		*04/17/2015 05:25*	WG782361
(S) Phenol-d5	*42.8*			*5.00-70.1*		*04/17/2015 05:25*	WG782361
(S) Nitrobenzene-d5	*74.8*			*21.8-123*		*04/17/2015 05:25*	WG782361
(S) 2-Fluorobiphenyl	*91.3*			*29.5-131*		*04/17/2015 05:25*	WG782361
(S) 2,4,6-Tribromophenol	*78.5*			*11.2-130*		*04/17/2015 05:25*	WG782361
(S) p-Terphenyl-d14	*78.1*			*29.3-137*		*04/17/2015 05:25*	WG782361

Method Blank (MB)

(MB) 04/17/15 15:30

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		2.82	10.0

L759238-01 Original Sample (OS) • Duplicate (DUP)

(OS) 04/17/15 15:24 • (DUP) 04/17/15 15:24

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	425	428	1	0.703		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/17/15 15:29 • (LCSD) 04/17/15 15:29

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Dissolved Solids	8800	8540	8520	97.0	96.8	85.0-115			0.234	5

Method Blank (MB)

(MB) 04/24/15 12:26

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Nitrate-Nitrite	U		0.0197	0.100

L759360-01 Original Sample (OS) • Duplicate (DUP)

(OS) 04/24/15 12:56 • (DUP) 04/24/15 12:57

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.61	0.61	1	0.00		20

L759184-01 Original Sample (OS) • Duplicate (DUP)

(OS) 04/24/15 12:33 • (DUP) 04/24/15 12:34

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	ND	ND	1	0.00		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/24/15 12:29 • (LCSD) 04/24/15 12:30

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Nitrate-Nitrite	5.00	4.95	5.03	99.0	101	90.0-110			1.60	20

L759281-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/24/15 12:35 • (MS) 04/24/15 12:36 • (MSD) 04/24/15 12:38

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrate-Nitrite	5.00	2.14	7.36	7.39	105	106	1	90.0-110			0.407	20

Method Blank (MB)

(MB) 04/21/15 09:31

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Cyanide	U		0.00180	0.00500

L759459-02 Original Sample (OS) • Duplicate (DUP)

(OS) 04/21/15 09:58 • (DUP) 04/21/15 09:59

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Cyanide	ND	ND	1	0.00		20

L759253-01 Original Sample (OS) • Duplicate (DUP)

(OS) 04/21/15 09:38 • (DUP) 04/21/15 09:39

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Cyanide	ND	ND	1	0.00		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/21/15 09:34 • (LCSD) 04/21/15 09:35

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Cyanide	0.100	0.109	0.105	109	105	90.0-110			3.74	20

L759253-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/21/15 09:41 • (MS) 04/21/15 09:42 • (MSD) 04/21/15 09:43

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Cyanide	0.200	0.000200	0.179	0.183	89.5	91.5	1	90.0-110	J6		2.21	20

Method Blank (MB)

(MB) 04/20/15 12:27

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.0519	1.00
Fluoride	U		0.0099	0.100
Sulfate	U		0.0774	5.00

L759295-01 Original Sample (OS) • Duplicate (DUP)

(OS) 04/20/15 13:44 • (DUP) 04/20/15 13:59

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	7.82	7.83	1	0		20
Fluoride	0.591	0.590	1	0		20
Sulfate	22.8	22.9	1	0		20

L759156-01 Original Sample (OS) • Duplicate (DUP)

(OS) 04/20/15 20:07 • (DUP) 04/20/15 20:22

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	2.96	3.04	1	3		20
Fluoride	0.234	0.234	1	0		20
Sulfate	13.5	13.6	1	0		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/20/15 12:42 • (LCSD) 04/20/15 12:57

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloride	40.0	40.1	39.9	100	100	90-110			1	20
Fluoride	8.00	8.10	8.02	101	100	90-110			1	20
Sulfate	40.0	40.1	39.7	100	99	90-110			1	20

L759081-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/20/15 16:18 • (MS) 04/20/15 16:33 • (MSD) 04/20/15 16:48

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	1.09	49.8	51.8	97	101	1	80-120			4	20

L759081-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/20/15 16:18 • (MS) 04/20/15 16:33 • (MSD) 04/20/15 16:48

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Fluoride	5.00	1.76	6.42	6.61	93	97	1	80-120			3	20
Sulfate	50.0	53.2	99.0	101	92	95	1	80-120			2	20

Method Blank (MB)

(MB) 04/21/15 09:24

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Mercury,Dissolved	U		0.000049	0.000200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/21/15 09:27 • (LCSD) 04/21/15 09:30

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Mercury,Dissolved	0.00300	0.00305	0.00313	102	104	80-120			3	20

L759281-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/21/15 09:32 • (MS) 04/21/15 09:35 • (MSD) 04/21/15 09:43

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury,Dissolved	0.00300	ND	0.00315	0.00311	105	104	1	75-125			1	20

Method Blank (MB)

(MB) 04/27/15 08:26

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Mercury	U		0.000049	0.000200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/27/15 08:28 • (LCSD) 04/27/15 08:30

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Mercury	0.00300	0.00297	0.00287	99	96	80-120			3	20

L760902-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/27/15 08:33 • (MS) 04/27/15 08:35 • (MSD) 04/27/15 08:37

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.00300	ND	0.00290	0.00282	97	94	1	75-125			3	20

Method Blank (MB)

(MB) 04/23/15 12:47

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Aluminum,Dissolved	0.00723		0.002	0.100
Arsenic,Dissolved	U		0.00025	0.00200
Barium,Dissolved	U		0.00036	0.00500
Boron,Dissolved	U		0.0015	0.0200
Cadmium,Dissolved	U		0.00016	0.00100
Calcium,Dissolved	0.119		0.046	1.00
Chromium,Dissolved	U		0.00054	0.00200
Copper,Dissolved	U		0.00052	0.00500
Cobalt,Dissolved	U		0.00026	0.00200
Iron,Dissolved	U		0.015	0.100
Lead,Dissolved	U		0.00024	0.00200
Manganese,Dissolved	0.000705		0.00025	0.00500
Molybdenum,Dissolved	U		0.00014	0.00500
Nickel,Dissolved	0.000423		0.00035	0.00200
Potassium,Dissolved	0.164		0.037	1.00
Selenium,Dissolved	U		0.00038	0.00200
Silver,Dissolved	U		0.00031	0.00200
Sodium,Dissolved	U		0.11	1.00
Uranium,Dissolved	U		0.00033	0.0100
Zinc,Dissolved	U		0.00256	0.0250

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/23/15 12:49 • (LCSD) 04/23/15 12:51

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Aluminum,Dissolved	5.00	4.91	4.95	98	99	80-120			1	20
Arsenic,Dissolved	0.0500	0.0548	0.0532	110	106	80-120			3	20
Barium,Dissolved	0.0500	0.0479	0.0499	96	100	80-120			4	20
Boron,Dissolved	0.0500	0.0449	0.0493	90	99	80-120			9	20
Cadmium,Dissolved	0.0500	0.0528	0.0515	106	103	80-120			3	20
Calcium,Dissolved	5.00	5.03	4.89	101	98	80-120			3	20
Chromium,Dissolved	0.0500	0.0494	0.0484	99	97	80-120			2	20
Copper,Dissolved	0.0500	0.0522	0.0505	104	101	80-120			3	20
Cobalt,Dissolved	0.0500	0.0509	0.0499	102	100	80-120			2	20
Iron,Dissolved	5.00	4.81	4.68	96	94	80-120			3	20
Lead,Dissolved	0.0500	0.0503	0.0505	101	101	80-120			0	20
Manganese,Dissolved	0.0500	0.0493	0.0488	99	98	80-120			1	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/23/15 12:49 • (LCSD) 04/23/15 12:51

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Molybdenum,Dissolved	0.0500	0.0499	0.0494	100	99	80-120			1	20
Nickel,Dissolved	0.0500	0.0506	0.0486	101	97	80-120			4	20
Potassium,Dissolved	5.00	5.12	5.20	102	104	80-120			2	20
Selenium,Dissolved	0.0500	0.0513	0.0536	103	107	80-120			4	20
Silver,Dissolved	0.0500	0.0532	0.0524	106	105	80-120			2	20
Sodium,Dissolved	5.00	5.15	5.24	103	105	80-120			2	20
Uranium,Dissolved	0.0500	0.0489	0.0490	98	98	80-120			0	20
Zinc,Dissolved	0.0500	0.0495	0.0472	99	94	80-120			5	20

L759281-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/23/15 13:38 • (MS) 04/23/15 12:58 • (MSD) 04/23/15 13:00

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aluminum,Dissolved	1.00	0.0166	5.42	5.65	108	113	5	75-125			4	20
Arsenic,Dissolved	0.0100	0.00104	0.0603	0.0628	119	124	5	75-125			4	20
Barium,Dissolved	0.0100	0.0696	0.125	0.121	111	102	5	75-125			4	20
Boron,Dissolved	0.0100	0.116	0.158	0.173	85	113	5	75-125			8	20
Cadmium,Dissolved	0.0100	0.000186	0.0563	0.0596	112	119	5	75-125			6	20
Calcium,Dissolved	1.00	685	706	726	146	535	5	75-125	V	V	3	20
Chromium,Dissolved	0.0100	ND	0.0516	0.0540	103	108	5	75-125			5	20
Copper,Dissolved	0.0100	0.0887	0.0570	0.0586	0	0	5	75-125	J6	J6	3	20
Cobalt,Dissolved	0.0100	ND	0.0544	0.0569	109	114	5	75-125			5	20
Potassium,Dissolved	1.00	5.48	10.9	11.2	109	114	5	75-125			2	20
Iron,Dissolved	1.00	0.0581	5.34	5.54	106	110	5	75-125			4	20
Lead,Dissolved	0.0100	0.000124	0.0538	0.0545	107	109	5	75-125			1	20
Manganese,Dissolved	0.0100	0.00244	0.0541	0.0579	103	111	5	75-125			7	20
Molybdenum,Dissolved	0.0100	0.0121	0.0670	0.0689	110	114	5	75-125			3	20
Nickel,Dissolved	0.0100	0.0175	0.0560	0.0577	77	80	5	75-125			3	20
Selenium,Dissolved	0.0100	0.00808	0.0630	0.0661	110	116	5	75-125			5	20
Silver,Dissolved	0.0100	0.000273	0.0569	0.0586	113	117	5	75-125			3	20
Sodium,Dissolved	1.00	60.0	67.5	68.7	151	175	5	75-125	V	V	2	20
Uranium,Dissolved	0.0100	0.00546	0.0598	0.0614	109	112	5	75-125			3	20
Zinc,Dissolved	0.0100	0.0161	0.0728	0.0720	114	112	5	75-125			1	20

Method Blank (MB)

(MB) 04/16/15 13:14

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	*91.1*			*62.0-128*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/16/15 10:57 • (LCSD) 04/16/15 11:19

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
TPH (GC/FID) Low Fraction	5.50	5.02	5.13	91.3	93.2	67.0-132			2.00	20
(S) a,a,a-Trifluorotoluene(FID)				*98.0*	*98.3*	*62.0-128*				

L757731-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/16/15 13:53 • (MS) 04/16/15 12:08 • (MSD) 04/16/15 12:30

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
TPH (GC/FID) Low Fraction	5.50	ND	5.13	5.44	93.3	98.9	1	50.0-143			5.84	20
(S) a,a,a-Trifluorotoluene(FID)					*98.5*	*98.9*		*62.0-128*				

Method Blank (MB)

(MB) 04/17/15 22:36

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	0.000383		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100

Method Blank (MB)

(MB) 04/17/15 22:36

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00200
(S) Toluene-d8	*103*			*88.5-111*
(S) Dibromofluoromethane	*97.4*			*78.3-121*
(S) 4-Bromofluorobenzene	*102*			*71.0-126*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/17/15 21:07 • (LCSD) 04/17/15 21:29

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.116	0.114	92.5	91.0	35.6-163			1.60	23.9
Benzene	0.0250	0.0222	0.0246	88.7	98.4	74.8-121			10.3	20
Bromodichloromethane	0.0250	0.0223	0.0246	89.3	98.3	75.1-116			9.62	20
Bromoform	0.0250	0.0232	0.0247	93.0	98.6	67.5-130			5.87	20
Bromomethane	0.0250	0.0242	0.0274	96.9	109	49.9-162			12.2	20
n-Butylbenzene	0.0250	0.0242	0.0263	97.0	105	76.2-126			7.95	20
sec-Butylbenzene	0.0250	0.0237	0.0261	95.0	105	74.4-127			9.58	20
Carbon disulfide	0.0250	0.0232	0.0258	92.9	103	64.6-140			10.5	20
Carbon tetrachloride	0.0250	0.0196	0.0224	78.2	89.7	70.2-123			13.7	20
Chlorobenzene	0.0250	0.0236	0.0261	94.6	104	78.1-119			9.95	20
Chlorodibromomethane	0.0250	0.0223	0.0240	89.3	96.0	74.0-121			7.20	20
Chloroethane	0.0250	0.0223	0.0249	89.1	99.7	61.7-135			11.2	20
Chloroform	0.0250	0.0222	0.0244	88.8	97.6	76.0-121			9.46	20
Chloromethane	0.0250	0.0219	0.0240	87.5	95.9	61.5-129			9.19	20
1,2-Dibromoethane	0.0250	0.0229	0.0243	91.7	97.1	76.6-121			5.71	20
1,1-Dichloroethane	0.0250	0.0230	0.0255	91.8	102	70.7-126			10.5	20
1,2-Dichloroethane	0.0250	0.0219	0.0230	87.4	92.0	68.8-124			5.13	20
1,1-Dichloroethene	0.0250	0.0236	0.0267	94.3	107	67.8-129			12.6	20
cis-1,2-Dichloroethene	0.0250	0.0227	0.0248	90.8	99.2	76.0-119			8.85	20
trans-1,2-Dichloroethene	0.0250	0.0235	0.0259	94.2	104	72.6-121			9.57	20
1,2-Dichloropropane	0.0250	0.0231	0.0252	92.4	101	76.5-119			8.62	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/17/15 21:07 • (LCSD) 04/17/15 21:29

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
cis-1,3-Dichloropropene	0.0250	0.0225	0.0243	90.2	97.4	78.2-120			7.67	20
trans-1,3-Dichloropropene	0.0250	0.0212	0.0228	84.6	91.0	74.3-123			7.23	20
Ethylbenzene	0.0250	0.0239	0.0269	95.6	108	78.8-122			11.8	20
2-Hexanone	0.125	0.116	0.113	92.9	90.0	65.6-144			3.08	20
Isopropylbenzene	0.0250	0.0237	0.0265	95.0	106	78.6-132			11.1	20
p-Isopropyltoluene	0.0250	0.0236	0.0263	94.3	105	74.0-131			10.9	20
2-Butanone (MEK)	0.125	0.103	0.104	82.2	83.6	55.0-149			1.71	20
Methylene Chloride	0.0250	0.0225	0.0240	89.9	95.9	70.3-120			6.45	20
4-Methyl-2-pentanone (MIBK)	0.125	0.114	0.116	91.4	92.6	70.5-133			1.31	20
Methyl tert-butyl ether	0.0250	0.0218	0.0227	87.4	91.0	71.2-126			4.03	20
Naphthalene	0.0250	0.0225	0.0239	90.0	95.7	68.4-128			6.17	20
n-Propylbenzene	0.0250	0.0236	0.0264	94.6	105	78.2-122			10.9	20
Styrene	0.0250	0.0240	0.0263	95.8	105	80.4-126			9.30	20
1,1,1,2-Tetrachloroethane	0.0250	0.0234	0.0257	93.6	103	74.2-124			9.14	20
1,1,2,2-Tetrachloroethane	0.0250	0.0224	0.0240	89.7	95.9	70.7-122			6.64	20
Tetrachloroethene	0.0250	0.0247	0.0278	99.0	111	72.6-126			11.8	20
Toluene	0.0250	0.0232	0.0252	92.7	101	79.7-116			8.22	20
1,1,1-Trichloroethane	0.0250	0.0229	0.0258	91.6	103	73.2-123			11.7	20
1,1,2-Trichloroethane	0.0250	0.0232	0.0242	92.9	96.7	77.7-118			3.98	20
Trichloroethene	0.0250	0.0244	0.0273	97.4	109	77.7-118			11.3	20
1,2,4-Trimethylbenzene	0.0250	0.0233	0.0258	93.4	103	75.0-123			10.2	20
1,3,5-Trimethylbenzene	0.0250	0.0237	0.0261	94.9	104	75.6-124			9.42	20
Vinyl chloride	0.0250	0.0240	0.0267	96.0	107	65.9-128			10.8	20
Xylenes, Total	0.0750	0.0717	0.0795	95.6	106	78.7-121			10.4	20
o-Xylene	0.0250	0.0237	0.0263	94.9	105	77.6-122			10.2	20
m&p-Xylenes	0.0500	0.0480	0.0532	95.9	106	78.8-121			10.4	20
(S) Toluene-d8				*102*	*103*	*88.5-111*				
(S) Dibromofluoromethane				*95.8*	*95.4*	*78.3-121*				
(S) 4-Bromofluorobenzene				*102*	*101*	*71.0-126*				

L759281-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/18/15 02:24 • (MS) 04/17/15 22:58 • (MSD) 04/17/15 23:20

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.00244	0.0782	0.0873	60.6	67.9	1	10.0-130			11.0	27.9
Benzene	0.0250	ND	0.0191	0.0221	76.3	88.3	1	54.3-133			14.6	20
Bromodichloromethane	0.0250	ND	0.0193	0.0231	77.2	92.3	1	63.9-121			17.8	20

L759281-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/18/15 02:24 • (MS) 04/17/15 22:58 • (MSD) 04/17/15 23:20

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Bromoform	0.0250	ND	0.0190	0.0235	75.9	93.9	1	59.5-134		J3	21.3	20.5
Bromomethane	0.0250	ND	0.0209	0.0244	83.8	97.7	1	41.7-155			15.3	21.9
n-Butylbenzene	0.0250	0.000433	0.0182	0.0220	70.9	86.2	1	62.7-140			19.1	20.3
sec-Butylbenzene	0.0250	ND	0.0189	0.0223	75.5	89.2	1	62.2-136			16.7	20.3
Carbon disulfide	0.0250	ND	0.0188	0.0217	75.3	86.8	1	43.3-149			14.2	20.3
Carbon tetrachloride	0.0250	ND	0.0164	0.0185	65.6	74.0	1	55.7-134			12.0	20
Chlorobenzene	0.0250	ND	0.0196	0.0237	78.4	94.9	1	67.0-125			19.0	20
Chlorodibromomethane	0.0250	ND	0.0189	0.0231	75.4	92.5	1	64.3-125			20.4	20.8
Chloroethane	0.0250	ND	0.0192	0.0213	76.7	85.2	1	51.5-136			10.5	40
Chloroform	0.0250	ND	0.0194	0.0223	77.7	89.2	1	63.0-129			13.7	20
Chloromethane	0.0250	ND	0.0184	0.0211	73.4	84.3	1	42.4-135			13.8	20
1,2-Dibromoethane	0.0250	ND	0.0187	0.0233	74.9	93.1	1	67.1-125		J3	21.6	20
1,1-Dichloroethane	0.0250	ND	0.0197	0.0228	78.8	91.4	1	58.5-132			14.8	20
1,2-Dichloroethane	0.0250	ND	0.0188	0.0219	75.4	87.5	1	60.0-126			14.9	20
1,1-Dichloroethene	0.0250	ND	0.0196	0.0227	78.6	90.7	1	51.1-140			14.4	20.2
cis-1,2-Dichloroethene	0.0250	ND	0.0193	0.0223	77.3	89.3	1	59.2-129			14.4	20
trans-1,2-Dichloroethene	0.0250	ND	0.0196	0.0226	78.3	90.6	1	56.5-129			14.6	20
1,2-Dichloropropane	0.0250	ND	0.0199	0.0231	79.7	92.6	1	64.2-123			14.9	20
cis-1,3-Dichloropropene	0.0250	ND	0.0195	0.0228	78.1	91.3	1	66.4-125			15.6	20
trans-1,3-Dichloropropene	0.0250	ND	0.0175	0.0208	69.8	83.4	1	64.1-128			17.7	20
Ethylbenzene	0.0250	ND	0.0200	0.0235	80.0	94.1	1	61.4-133			16.2	20
2-Hexanone	0.125	ND	0.0862	0.104	69.0	83.2	1	43.3-137			18.7	25.5
Isopropylbenzene	0.0250	ND	0.0192	0.0228	76.7	91.2	1	66.8-141			17.4	20
p-Isopropyltoluene	0.0250	ND	0.0187	0.0223	74.6	89.2	1	63.2-139			17.9	20.4
2-Butanone (MEK)	0.125	ND	0.0774	0.0909	61.9	72.7	1	22.4-138			16.0	27
Methylene Chloride	0.0250	ND	0.0193	0.0225	77.4	89.9	1	58.1-122			15.0	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.0909	0.106	72.7	85.1	1	60.8-140			15.7	25.1
Methyl tert-butyl ether	0.0250	ND	0.0191	0.0224	76.2	89.8	1	57.7-134			16.4	20
Naphthalene	0.0250	0.000609	0.0170	0.0219	65.5	85.2	1	58.0-135			25.4	25.5
n-Propylbenzene	0.0250	ND	0.0189	0.0227	75.7	90.9	1	65.9-131			18.2	20
Styrene	0.0250	ND	0.0198	0.0244	79.3	97.5	1	66.8-133		J3	20.5	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0201	0.0239	80.3	95.8	1	64.0-128			17.6	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0192	0.0230	77.0	91.9	1	56.0-132			17.6	22.2
Tetrachloroethene	0.0250	ND	0.0204	0.0237	81.6	94.8	1	53.0-139			14.9	20
Toluene	0.0250	ND	0.0193	0.0226	77.3	90.2	1	61.4-130			15.5	20
1,1,1-Trichloroethane	0.0250	ND	0.0192	0.0217	76.8	87.0	1	58.7-134			12.5	20
1,1,2-Trichloroethane	0.0250	ND	0.0195	0.0230	78.0	92.1	1	66.3-125			16.6	20
Trichloroethene	0.0250	ND	0.0202	0.0228	80.7	91.4	1	44.1-149			12.4	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0189	0.0230	75.6	92.1	1	57.4-137			19.7	20

L759281-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/18/15 02:24 • (MS) 04/17/15 22:58 • (MSD) 04/17/15 23:20

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,3,5-Trimethylbenzene	0.0250	ND	0.0193	0.0231	77.3	92.4	1	63.6-132			17.7	20.5
Vinyl chloride	0.0250	ND	0.0198	0.0224	79.4	89.7	1	47.8-137			12.2	20
Xylenes, Total	0.0750	ND	0.0595	0.0708	79.4	94.4	1	63.3-131			17.3	20
o-Xylene	0.0250	ND	0.0198	0.0238	79.1	95.1	1	63.3-130			18.4	20
m&p-Xylenes	0.0500	ND	0.0398	0.0470	79.5	94.0	1	61.7-133			16.7	20
(S) Toluene-d8					*103*	*103*		*88.5-111*				
(S) Dibromofluoromethane					*95.3*	*95.7*		*78.3-121*				
(S) 4-Bromofluorobenzene					*102*	*103*		*71.0-126*				

Method Blank (MB)

(MB) 04/16/15 16:25

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
C10-C28 Diesel Range	U		0.0222	0.100
C28-C40 Oil Range	U		0.0118	0.100
(S) o-Terphenyl	*112*			*50.0-150*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/16/15 16:42 • (LCSD) 04/16/15 16:59

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	1.50	1.33	1.34	88.9	89.6	70.0-130			0.780	20
(S) o-Terphenyl				*60.0*	*65.9*	*50.0-150*				

Method Blank (MB)

(MB) 04/20/15 10:05

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
PCB 1260	U		0.000120	0.000500
PCB 1016	U		0.000100	0.000500
PCB 1221	U		0.0000730	0.000500
PCB 1232	U		0.0000420	0.000500
PCB 1242	U		0.0000470	0.000500
PCB 1248	U		0.0000860	0.000500
PCB 1254	U		0.0000470	0.000500
(S) Decachlorobiphenyl	*71.2*			*10.0-156*
(S) Tetrachloro-m-xylene	*79.7*			*13.9-137*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/20/15 10:17 • (LCSD) 04/20/15 10:30

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
PCB 1260	0.00250	0.00243	0.00238	97.0	95.1	47.7-149			2.00	28.8
PCB 1016	0.00250	0.00214	0.00213	85.7	85.3	24.7-128			0.460	34.9
(S) Decachlorobiphenyl				*91.8*	*87.0*	*10.0-156*				
(S) Tetrachloro-m-xylene				*80.3*	*82.3*	*13.9-137*				