



DuPont Pompton Lakes Works
2000 Cannonball Road
Pompton Lakes, NJ 07442

September 10, 2013

Mr. Philip D. Flax
USEPA REGION 2
290 Broadway
Mail Code: 22ND FL
New York, NY 10007-1866

**RE: EISB Pilot Study Status Report #2
DuPont Pompton Lakes Works
Pompton Lakes, New Jersey**

Dear Mr. Flax:

Enclosed is the monthly status report that summarizes activities associated with the interim remedial measure (IRM) pilot study using enhanced in-situ bioremediation (EISB) being conducted in accordance with the Agency-approved *Implementation Work Plan for Application of EISB to Intermediate Groundwater Near Well 128* dated January 31, 2012 and *Technical Memorandum –Response to Comments* dated March 30, 2012.

This status report covers the time period of August 3 through 31, 2013.

If you have any questions, please contact me at (973) 492-7733.

Sincerely,

A handwritten signature in black ink that reads "David E. Epps".

David E. Epps, P.G.
Project Director, Pompton Lakes Works
DuPont Corporate Remediation Group

cc: Anthony Cinque – NJDEP
PLW Central File

Monthly Progress Report – EISB Pilot Study
Report Period – August 3, 2013 through August 31, 2013

DuPont Pompton Lakes Works
Pompton Lakes, New Jersey

This monthly report summarizes activities completed from August 3 to 31, 2013 associated with the interim remedial measure (IRM) pilot study using enhanced in-situ bioremediation (EISB) in the intermediate aquifer in the area of monitoring well cluster 128 (see Figure 1 for Site layout). Work is being conducted in accordance with the Agency-approved *Implementation Work Plan for Application of EISB to Intermediate Groundwater Near Well 128* dated January 31, 2012 and *Technical Memorandum – Response to Comments* dated March 30, 2012.

Activities Completed During Reporting Period (August 3, 2013 to August 31, 2013)

Pilot study activities completed during the reporting period included system operation and sampling.

Recirculation System Operation/Maintenance

- Groundwater was extracted from EW01 at a rate of approximately 3 gallons per minute (GPM). On August 14, 2013 the globe valve which controls the extraction pump flow rate was changed out with a diaphragm valve to minimize minor fluctuations observed in the flow rate. When the operator checks the system, flow rates are adjusted as needed.
- Potassium bromide was continuously amended to the re-injected groundwater. The target injection concentration for bromide was 100 mg/L. Bromide addition was originally planned for up to four weeks, but was extended for another four weeks (through August 16, 2013) to ensure there is sufficient bromide in the study area for evaluation. Bromide concentrations will continue to be monitored in the study area.
- Sodium lactate was amended to the re-injected groundwater once per day at a target time weighted average of lactate at 165 milligrams per liter (mg/L).
- Twenty liters of site groundwater was bioaugmented with a dechlorinating consortium (KB-1[®]) and amended to IW02 on August 2, 2013. Recirculation did not occur over the weekend (August 3 and 4, 2013) to allow for the culture to acclimate. Recirculation re-commenced on August 5, 2013.
- Routine system maintenance (e.g., particulate filter change outs, valve replacements, flow rate adjustments) was conducted during the reporting period. The EW and IW vaults were visually inspected on a weekly basis to confirm integrity of system components.
- System interlocks shut the system down as designed due to the presence of water (leak detection sensor alarm conditions) in the vault or due to high line pressure. Efforts to make the vault more water tight have been completed. There was one leak detection sensor alarm

on August 14, 2013 after a heavy rain event and one high line pressure alarm on August 5, 2013. In-line particulate filters were replaced along with the flow valve change to address the high line pressure detections.

Results to Date

Groundwater Pumping

From system start-up (June 24, 2013) to August 30, 2013, the total recirculated groundwater was 224,166 gallons.

Water Level Monitoring

Manual water level measurements were collected approximately once per week in the surrounding monitoring wells (Table 1). Results are reported as depth-to-water in units of feet below top of casing (ft btoc) and as the converted elevation in units of feet relative to mean sea level (ft msl). Level logger data from IW01, IW02, IW03, EW01, 128I, and 128S will be included in the final pilot study report. Drawdown in the extraction well (EW01) during operation is typically 14 feet and mounding at IW02 is 3.5 feet (based on data from levelloggers). In the latter part of August, drawdown increased significantly at EW01 (from 14 ft to approximately 29 ft). This drawdown behavior is likely due to silting in of the extraction well. Rehabilitation will be required and will be scheduled for September.

Estimations of the gradient under pumping conditions are approximately 0.48 feet/feet (ft/ft). This estimate was obtained by using water level measurements from multiple time points from the lower zone of both the injection well (IW02) and extraction well (EW01) under pumping conditions.

Water Quality Monitoring

Groundwater samples for volatile organic compounds (VOCs), dissolved hydrocarbon gases (DHG), and Dehalococoides (Dhc) analysis were collected during the reporting period from the wells in the 128 area as outlined in the *Implementation Work Plan for Application of EISB to Intermediate Groundwater Near Well 128* dated January 31, 2012. The water quality field parameter data recorded during well purging and prior to sampling are provided in Table 2. A summary of the VOC, DHG, and Dhc data for the baseline and first bi-weekly and first monthly sampling event is presented in Table 3. The first monthly sampling event results indicate that total organic carbon (TOC) concentrations are increasing (up to 48 mg/L) in the target intermediate zone (nominally from 40 to 65 ft below ground surface [bgs]) in ML02. Increasing TOC concentrations is reflective of the transport of amended lactate donor from the injection well. TOC concentrations in the remaining pilot treatment area monitoring wells remain below 20 mg/L. A complete copy of the analytical results generated during these events will be provided in the final study report.

Bromide Tracer Monitoring

Bromide detections at the various well locations are shown in Figure 2. The intent of the bromide measurements is to serve as a tracer to groundwater flow under re-circulating conditions and to aid in the understanding of extraction well capture efficiency, pore volume estimations, and correlating changes in VOC concentrations to EISB related activities. Given the modest concentrations of bromide at the extraction well after one month of tracer addition, it was decided to continue to add bromide for an additional month to ensure there was sufficient bromide in the system for the remainder of the recirculation period.

Results to date for the field analysis of bromide indicate that re-injected groundwater is reaching the target intermediate zone (nominally from 40 to 65 ft bgs) in ML02, and further downgradient at ML04. Bromide has been detected at IW03 (the closest injection well) and IW01 at up to 54 mg/L and 5 mg/L, respectively. By the end of August, the bromide concentration at EW01 was approximately 13 mg/L. Based on the observed bromide concentrations in the extraction well at the end of two months of operation, it appears the travel time of bromide is longer than anticipated. Bromide monitoring will continue into September as outlined in the *Technical Memorandum – Response to Comments* dated March 30, 2012.

Bromide results indicate there is connectivity between ML02-01 and ML02-02. The presence of bromide at ML02-01 and no other shallow location was not consistent with flow conditions experienced as part of the pilot test hydraulic modeling. In an effort to understand the conditions being observed, a short-term hydraulic pump test was conducted on ML02 during August and confirmed that the shallowest multilevel monitoring location was hydraulically connected to one of the intermediate monitoring locations. It is believed that, during installation of the multi-level well, the tubing wall of ML02-01 was potentially nicked and has ultimately caused connectivity with ML02-02 (which is unaffected). Due to this condition, further sampling of ML02-01 will not be continued.

Summary

Overall the results to date for the EISB pilot study are as expected. Groundwater recirculation and electron donor amendment will continue during the next month of operation. The system will be shut down in September to complete rehabilitation at EW01. Once EW01 has been rehabilitated to sustainable conditions, the system will be turned back on and amendment of lactate will proceed. Future groundwater monitoring activities will continue to monitor concentrations of key parameters in order to evaluate the operation and performance of the EISB system.

Activities Scheduled for Next Reporting Period (September 1~30, 2013)

Activities to be completed during September 2013 include:

- Continued operation of the pilot-scale EISB system,
- 3rd bi-weekly monitoring event (week of September 9th),
- Rehabilitation of EW01 (week of September 23rd), and
- 3rd monthly monitoring event (week of September 30th).

The system will be routinely checked to confirm operation and monitor groundwater flow conditions.

Attachments

Table 1: Depth to Groundwater

Table 2: Field Parameter Results

Table 3: Select Target Compound Results

Figure 1: Site Layout

Figure 2: Field Measured Bromide Concentrations

**TABLE 1
DEPTH TO GROUNDWATER
Pompton Lakes Works
Pompton Lakes, New Jersey**

Well ID	Top of Casing Elevation (ft amsl)	Date (mm/dd/yyyy)	Time (hh:mm)	Depth to Water (ft btoc)	Groundwater Elevation (ft amsl)
I28S	218.99	6/21/2013	16:03	8.3	210.69
		6/24/2013	11:40	8.78	210.21
		07/19/13	9:44	8.93	210.06
		07/23/13	14:49	9.05	209.94
		07/29/13	15:15	9.25	209.74
		08/06/13	16:10	9.48	209.51
		08/08/13	13:15	9.52	209.47
		08/16/13	10:47	9.66	209.33
		08/20/13	13:35	9.76	209.23
		08/29/13	13:02	10.01	208.98
I28I	218.79	6/21/2013	16:19	8.09	210.70
		6/24/2013	11:46	8.07	210.72
		07/19/13	9:47	8.75	210.04
		07/23/13	14:34	8.80	209.99
		07/29/13	15:05	9.07	209.72
		08/06/13	16:00	9.29	209.50
		08/08/13	13:12	9.26	209.53
		08/16/13	10:44	9.51	209.28
		08/20/13	13:40	9.63	209.16
		08/29/13	12:51	9.94	208.85
EW01-Upper	218.71	6/21/2013	15:07	7.88	210.83
		6/24/2013	13:48	7.86	210.85
		6/28/2013	10:48	7.95	210.76
		07/09/13	12:18	8.38	210.33
		07/19/13	10:53	8.46	210.25
		07/23/13	8:54	8.59	210.12
		07/26/13	13:40	8.53	210.18
		08/06/13	10:20	9.08	209.63
				08/08/13	13:34
IW01-Upper	217.65	6/21/2013	16:34	7.98	209.67
		6/24/2013	11:31	7.95	209.70
		07/03/13	11:55	8.11	209.54
		07/09/13	11:45	8.45	209.20
		07/10/13	13:42	8.25	209.40
		07/19/13	9:54	8.54	209.11
		07/23/13	13:50	8.68	208.97
		07/26/13	12:20	8.78	208.87
		07/29/13	14:00	8.87	208.78
		08/06/13	15:23	9.11	208.54
		08/08/13	12:05	9.19	208.46
		08/16/13	10:37	9.31	208.34
		08/20/13	13:05	9.41	208.24
		08/22/13	8:44	9.48	208.17
		08/28/13	15:03	9.64	208.01
IW01-Lower	217.65	6/21/2013	16:36	8.06	209.59
		6/24/2013	11:33	8.04	209.61
		07/04/13	11:53	8.15	209.50
		07/09/13	11:43	8.55	209.10
		07/10/13	13:42	8.30	209.35
		07/19/13	9:53	8.92	208.73
		07/23/13	13:45	8.45	209.20
		07/26/13	12:21	8.87	208.78
		07/29/13	14:01	8.65	209.00
		08/06/13	15:22	9.18	208.47
		08/08/13	12:03	9.18	208.47
		08/16/13	10:37	9.41	208.24
		08/20/13	13:05	9.50	208.15
		08/22/13	8:45	9.57	208.08
		08/28/13	15:04	9.73	207.92

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Pompton Lakes Works
Pompton Lakes, New Jersey**

Well ID	Top of Casing Elevation (ft amsl)	Date (mm/dd/yyyy)	Time (hh:mm)	Depth to Water (ft btoc)	Groundwater Elevation (ft amsl)
IW02-Upper	217.59	6/21/2013	16:53	7.24	210.35
		6/24/2013	15:34	7.22	210.37
		6/28/2013	13:16	7.32	210.27
		07/19/13	10:02	7.80	209.79
		07/23/13	12:11	7.96	209.63
		07/26/13	12:59	8.05	209.54
		07/29/13	14:55	8.14	209.45
		08/06/13	15:07	8.36	209.23
		08/08/13	13:05	8.43	209.16
		08/20/13	13:50	8.28	209.31
		08/22/13	8:50	8.73	208.86
IW03-Upper	217.58	6/21/2013	17:02	7.98	209.60
		6/24/2013	11:26	7.95	209.63
		6/28/2013	12:10	8.01	209.57
		07/04/13	10:34	8.13	209.45
		07/09/13	10:49	8.48	209.10
		07/10/13	9:40	8.26	209.32
		07/19/13	10:22	8.55	209.03
		07/23/13	11:17	8.67	208.91
		07/26/13	11:27	8.78	208.80
		07/29/13	12:35	8.87	208.71
		08/06/13	14:12	9.13	208.45
		08/08/13	11:25	9.18	208.40
		08/16/13	10:28	9.32	208.26
		08/20/13	12:30	9.46	208.12
		08/22/13	8:36	9.48	208.10
		08/28/13	14:41	9.65	207.93
IW03-Lower	217.58	6/21/2013	17:03	8.03	209.55
		6/24/2013	11:27	8.08	209.50
		6/28/2013	12:11	8.15	209.43
		07/03/13	10:27	8.25	209.33
		07/09/13	10:49	8.50	209.08
		07/10/13	9:40	8.20	209.38
		07/19/13	10:22	8.58	209.00
		07/23/13	11:16	8.55	209.03
		07/26/13	11:26	8.81	208.77
		07/29/13	12:36	8.92	208.66
		08/06/13	14:13	9.11	208.47
		08/08/13	11:25	9.17	208.41
		08/16/13	10:28	9.36	208.22
		08/20/13	12:30	9.48	208.10
		08/22/13	8:35	9.51	208.07
08/28/13	14:40	9.70	207.88		
ML02-1	217.80	6/24/2013	11:53	7.75	210.05
		07/02/13	14:30	7.91	209.89
		07/09/13	9:59	8.21	209.59
		07/10/13	13:12	8.00	209.80
		07/12/13	10:20	8.07	209.73
		07/19/13	10:15	8.64	209.16
		07/23/13	10:27	8.79	209.01
		07/26/13	10:30	8.89	208.91
		07/29/13	11:32	8.98	208.82
		07/31/13	10:45	9.02	208.78
		08/06/13	11:28	9.21	208.59
		08/08/13	10:31	9.27	208.53
		08/14/13	NR	9.51	208.29
		08/16/13	10:15	9.42	208.38
08/20/13	10:24	9.52	208.28		
08/27/13	9:15	9.37	208.43		

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DEPTH TO GROUNDWATER
Pompton Lakes Works
Pompton Lakes, New Jersey**

Well ID	Top of Casing Elevation (ft amsl)	Date (mm/dd/yyyy)	Time (hh:mm)	Depth to Water (ft btoc)	Groundwater Elevation (ft amsl)
ML02-2	217.80	6/24/2013	11:54	7.73	210.07
		07/02/13	14:31	7.91	209.89
		07/09/13	9:59	8.21	209.59
		07/10/13	13:12	7.98	209.82
		07/12/13	10:20	8.05	209.75
		07/19/13	10:16	8.63	209.17
		07/23/13	10:27	8.79	209.01
		07/26/13	10:31	8.89	208.91
		07/29/13	11:33	8.96	208.84
		07/31/13	10:45	9.00	208.80
		08/06/13	11:29	9.16	208.64
		08/08/13	10:31	9.19	208.61
		08/14/13	NR	9.04	208.76
		08/16/13	10:15	9.39	208.41
		08/20/13	10:24	9.48	208.32
ML02-3	217.80	6/24/2013	11:54	7.78	210.02
		07/02/13	14:31	7.92	209.88
		07/09/13	9:59	7.97	209.83
		07/10/13	13:13	7.68	210.12
		07/12/13	10:21	8.05	209.75
		07/19/13	10:16	8.38	209.42
		07/23/13	10:26	8.81	208.99
		07/26/13	10:31	8.61	209.19
		07/29/13	11:33	8.70	209.10
		07/31/13	10:46	8.76	209.04
		08/06/13	11:30	8.89	208.91
		08/08/13	10:32	8.98	208.82
		08/14/13	NR	8.79	209.01
		08/16/13	10:16	9.12	208.68
		08/20/13	10:25	9.23	208.57
ML02-4	217.80	6/24/2013	11:55	7.67	210.13
		07/02/13	14:32	7.93	209.87
		07/09/13	10:00	8.15	209.65
		07/10/13	13:13	7.90	209.90
		07/12/13	10:21	8.05	209.75
		07/19/13	10:17	8.57	209.23
		07/23/13	10:26	8.82	208.98
		07/26/13	10:31	8.78	209.02
		07/29/13	11:34	8.89	208.91
		07/31/13	10:47	8.96	208.84
		08/06/13	11:30	9.11	208.69
		08/08/13	10:33	9.16	208.64
		08/14/13	NR	8.98	208.82
		08/16/13	10:16	9.34	208.46
		08/20/13	10:25	9.44	208.36
ML02-5	217.80	6/24/2013	11:56	7.71	210.09
		07/02/13	14:33	7.92	209.88
		07/09/13	10:00	8.20	209.60
		07/10/13	13:14	7.99	209.81
		07/12/13	10:21	8.04	209.76
		07/19/13	10:17	8.64	209.16
		07/23/13	10:25	8.78	209.02
		07/26/13	10:32	8.84	208.96
		07/29/13	11:34	8.94	208.86
		08/06/13	11:31	9.17	208.63

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Pompton Lakes Works
Pompton Lakes, New Jersey**

Well ID	Top of Casing Elevation (ft amsl)	Date (mm/dd/yyyy)	Time (hh:mm)	Depth to Water (ft btoc)	Groundwater Elevation (ft amsl)
ML02-5	217.8	08/08/13	10:33	9.22	208.58
		08/14/13	NR	9.05	208.75
		08/16/13	10:24	9.40	208.40
		08/20/13	10:26	9.51	208.29
		08/27/13	9:16	9.35	208.45
ML02-6	217.80	6/24/2013	11:56	7.71	210.09
		07/02/13	14:33	7.92	209.88
		07/09/13	10:00	8.20	209.60
		07/10/13	13:14	7.98	209.82
		07/12/13	10:21	8.04	209.76
		07/19/13	10:18	8.63	209.17
		07/23/13	10:25	8.76	209.04
		07/26/13	10:32	8.84	208.96
		07/29/13	11:35	8.94	208.86
		07/31/13	10:48	9.02	208.78
		08/06/13	11:31	9.18	208.62
		08/08/13	10:33	9.25	208.55
		08/14/13	NR	9.05	208.75
		08/16/13	10:24	9.40	208.40
		08/20/13	10:26	9.53	208.27
08/27/13	9:17	9.35	208.45		
ML02-7	217.8	6/24/2013	11:57	7.77	210.03
		07/02/13	14:34	7.98	209.82
		07/09/13	10:01	8.34	209.46
		07/10/13	13:15	8.01	209.79
		07/12/13	10:27	8.03	209.77
		07/19/13	10:18	8.77	209.03
		07/23/13	10:24	8.70	209.10
		07/26/13	10:33	8.98	208.82
		07/29/13	11:35	9.08	208.72
		07/31/13	10:48	9.14	208.66
		08/06/13	11:32	9.21	208.59
		08/08/13	10:34	9.26	208.54
		08/14/13	NR	9.18	208.62
		08/16/13	10:25	9.49	208.31
		08/20/13	10:26	9.63	208.17
08/27/13	9:17	9.47	208.33		
ML04-1	217.71	6/24/2013	12:03	7.75	209.96
		6/28/2013	11:14	7.99	209.72
		07/02/13	11:48	8.13	209.58
		07/09/13	9:19	8.05	209.66
		07/10/13	9:04	7.83	209.88
		07/12/13	8:56	7.91	209.80
		07/19/13	8:35	8.52	209.19
		07/23/13	9:37	8.62	209.09
		07/26/13	9:22	8.75	208.96
		07/29/13	10:17	8.83	208.88
		07/31/13	8:59	9.10	208.61
		08/06/13	9:43	9.09	208.62
		08/08/13	9:35	9.16	208.55
		08/15/13	9:20	9.34	208.37
		08/16/13	10:08	9.30	208.41
08/20/13	9:27	9.45	208.26		
08/27/13	9:20	9.18	208.53		
ML04-2	217.71	6/24/2013	12:04	7.76	209.95
		6/28/2013	11:14	8.33	209.38
		07/02/13	11:49	8.39	209.32
		07/09/13	9:20	8.45	209.26
		07/10/13	9:04	8.20	209.51

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DEPTH TO GROUNDWATER
Pompton Lakes Works
Pompton Lakes, New Jersey**

Well ID	Top of Casing Elevation (ft amsl)	Date (mm/dd/yyyy)	Time (hh:mm)	Depth to Water (ft btoc)	Groundwater Elevation (ft amsl)
ML04-2	217.71	07/12/13	8:56	8.13	209.58
		07/19/13	8:35	8.90	208.81
		07/23/13	9:36	9.01	208.70
		07/26/13	9:23	9.19	208.52
		07/29/13	10:18	9.26	208.45
		07/31/13	9:00	9.27	208.44
		08/06/13	9:44	9.37	208.34
		08/08/13	9:36	9.43	208.28
		08/15/13	9:21	9.58	208.13
		08/16/13	10:08	9.65	208.06
		08/20/13	9:28	9.72	207.99
08/27/13	9:20	9.70	208.01		
ML04-3	217.71	6/24/2013	12:05	7.58	210.13
		6/28/2013	11:15	8.03	209.68
		07/02/13	11:49	8.15	209.56
		07/09/13	9:20	8.07	209.64
		07/10/13	9:04	7.82	209.89
		07/12/13	8:57	7.90	209.81
		07/19/13	8:35	8.52	209.19
		07/23/13	9:35	8.67	209.04
		07/26/13	9:25	8.80	208.91
		07/29/13	10:19	8.86	208.85
		07/31/13	9:01	8.93	208.78
		08/06/13	9:44	9.09	208.62
		08/08/13	9:36	9.14	208.57
		08/15/13	9:21	9.31	208.40
		08/16/13	10:09	9.31	208.40
08/20/13	9:29	9.36	208.35		
08/27/13	9:21	9.16	208.55		
ML04-4	217.71	6/24/2013	12:06	7.57	210.14
		6/28/2013	11:15	8.04	209.67
		07/02/13	11:49	8.16	209.55
		07/09/13	9:20	8.06	209.65
		07/10/13	9:05	7.82	209.89
		07/12/13	8:57	7.90	209.81
		07/19/13	8:35	8.51	209.20
		07/23/13	9:33	8.67	209.04
		07/26/13	9:25	8.81	208.90
		07/29/13	10:19	8.87	208.84
		07/31/13	9:02	8.94	208.77
		08/06/13	9:45	9.09	208.62
		08/08/13	9:37	9.16	208.55
		08/15/13	9:22	9.30	208.41
		08/16/13	10:09	9.32	208.39
08/20/13	9:29	9.40	208.31		
08/27/13	9:21	9.16	208.55		
ML04-5	217.71	6/24/2013	12:07	7.57	210.14
		6/28/2013	11:16	8.05	209.66
		07/02/13	11:50	8.16	209.55
		07/09/13	9:21	8.06	209.65
		07/10/13	9:05	7.83	209.88
		07/12/13	8:57	7.89	209.82
		07/19/13	8:35	8.53	209.18
		07/23/13	9:32	8.65	209.06
		07/26/13	9:25	8.80	208.91
		07/29/13	10:20	8.87	208.84
		07/31/13	9:04	8.97	208.74
		08/06/13	9:47	9.13	208.58
		08/08/13	9:37	9.19	208.52

**TABLE 1
DEPTH TO GROUNDWATER
Pompton Lakes Works
Pompton Lakes, New Jersey**

Well ID	Top of Casing Elevation (ft amsl)	Date (mm/dd/yyyy)	Time (hh:mm)	Depth to Water (ft btoc)	Groundwater Elevation (ft amsl)
ML04-5	217.71	08/15/13	9:23	9.32	208.39
		08/16/13	10:09	9.34	208.37
		08/20/13	9:30	9.44	208.27
		08/27/13	9:21	9.20	208.51
ML04-6	217.71	6/24/2013	12:08	7.56	210.15
		6/28/2013	11:16	8.03	209.68
		07/02/13	11:50	8.15	209.56
		07/09/13	9:21	8.06	209.65
		07/10/13	9:05	7.81	209.90
		07/12/13	8:58	7.89	209.82
		07/19/13	8:35	8.48	209.23
		07/23/13	9:31	8.64	209.07
		07/26/13	9:26	8.76	208.95
		07/29/13	10:20	8.86	208.85
		07/31/13	9:05	8.93	208.78
		08/06/13	9:48	9.11	208.60
		08/08/13	9:38	9.18	208.53
		08/15/13	9:24	9.31	208.40
		08/16/13	10:10	9.34	208.37
08/20/13	9:30	9.43	208.28		
08/27/13	9:22	9.20	208.51		
ML04-7	217.71	6/24/2013	12:09	7.70	210.01
		6/28/2013	11:17	8.13	209.58
		07/02/13	11:50	8.25	209.46
		07/09/13	9:21	8.23	209.48
		07/10/13	9:05	7.95	209.76
		07/12/13	8:58	7.89	209.82
		07/19/13	8:35	8.79	208.92
		07/23/13	9:30	8.82	208.89
		07/26/13	9:26	9.14	208.57
		07/29/13	10:20	9.05	208.66
		07/31/13	9:06	9.24	208.47
		08/06/13	9:49	9.19	208.52
		08/08/13	9:38	9.32	208.39
		08/15/13	9:25	9.41	208.30
		08/16/13	10:10	9.40	208.31
08/20/13	9:31	9.46	208.25		
08/27/13	9:22	9.31	208.40		

Notes:

hh:mm - hour:minute
 ft amsl - feet above mean sea level
 ft btoc - feet below top of casing
 mm/dd/yyyy - month/day/year

TABLE 2
FIELD PARAMETER RESULTS
Pompton Lakes Works
Pompton Lakes, New Jersey

Well Identifier	Well Screen Interval (ft bgs)	Date Sampled	Time	Flow Rate (ml/m)	Temperature (°C)	pH	Conductivity (µs)	ORP (mV)	Dissolved Oxygen (mg/L)	Volume Purged (gal)	Water Level (ft btoc)	Comments
128	6.24-26.24	01-May-13	14:02	200	13.2	6.61	0.86	213	6.9	4.0	9.92	Slightly turbid
128-I	61.36-71.36	02-May-13	11:45	150	14.9	9.29	0.93	-108	0.7	5.0	10.20	Slightly tan-brown/clear
128-D	125.2-145.2	02-May-13	15:35	140	16.3	8.85	0.30	-246	0.8	3.5	12.54	Sulfur/degradation odor
EW-01-Upper	21.60 - 45.92	16-May-13	16:09	375	15.3	7.65	0.45	-92	0.8	7.0	9.50	Clear, No Odor
		17-Jul-13	15:00	200	19.6	7.57	0.39	200	0.4	--	--	Clear, No Odor
		02-Aug-13	10:25	200	17.3	7.33	0.42	-2	1.6	3.0	7.33	Clear, No Odor
		15-Aug-13	11:15	250	17.4	7.58	0.44	40	0.5	3.0	9.25	Clear, No Odor
		28-Aug-13	10:30	200	18.6	7.39	0.42	50	0.9	2.5	--	Clear, No Odor
EW-01-Lower	50.69 - 75.00	17-Jul-13	10:08	375	19.7	8.97	0.92	239	1.6	1.6	--	Clear, No Odor
		01-Aug-13	16:30	200	17.2	9.00	0.77	-118	0.9	2.0	--	
		15-Aug-13	9:50	300	15.9	8.98	0.84	-61	0.4	3.0	--	Clear, No Odor
		28-Aug-13	11:40	300	16.8	8.82	0.82	-173	0.3	5.0	--	Clear, No Odor
IW-01-Upper	19.90-44.90	14-May-13	12:30	275	15.4	7.94	0.45	73	0.7	7.0	9.64	Clear, No Odor
IW-01-Lower	49.70-74.20	14-May-13	16:31	360	15.1	8.57	0.81	8	0.7	--	9.73	Clear, No Odor
IW-02-Upper	21.60-45.92	04-Jun-13	12:33	360	16.7	7.60	0.35	-81	1.5	5.7	8.38	Clear, No Odor
IW-02-Lower	50.69-75.00	15-May-13	15:00	200	16.0	8.87	0.91	-118	0.9	2.5	9.22	Slightly turbid/gray
IW-03-Upper	21.10-45.42	15-May-13	12:20	350	15.1	7.29	0.53	117	1.2	6.0	9.62	Clear, No Odor
IW-03-Lower	50.19-75.50	16-May-13	12:22	370	16.3	9.03	0.98	-55	0.8	12.5	9.62	Slight tan/yellow
ML02-1	14.42-14.92	14-May-13	10:00	200	15.0	6.85	0.31	109	1.5	2.5	9.70	Clear, No Odor
		31-Jul-13	12:10	240	17.8	8.93	0.42	-133	1.0	4.0	--	Clear, No Odor
		27-Aug-13	10:10	190	18.1	6.94	0.39	-151	0.7	2.1	--	Clear, very slight sulfur odor
ML02-6	24.39-24.89	14-May-13	11:28	200	15.7	7.77	0.40	-5	0.8	4.0	9.69	Light brown/turbid
		31-Jul-13	13:35	180	17.3	9.63	0.38	-97	0.7	3.0	--	Very clear, no odor.
		27-Aug-13	11:10	175	17.1	7.71	0.39	-82	0.5	2.2	--	Clear, no odor.
ML02-5	34.36-34.86	14-May-13	12:45	200	16.3	8.35	0.37	-106	0.7	2.5	9.71	Slightly brown, Slightly turbid
		17-Jul-13	11:00	200	17.3	8.28	0.35	-107	0.3	3.0	8.23	Slightly turbid, gray
		31-Jul-13	15:25	180	18.2	10.02	0.36	-170	0.6	2.4	--	Clear, No Odor
		14-Aug-13	10:25	190	17.1	8.10	0.36	-72	0.7	3.0	--	Clear, very slight sulfur degradation odor
		27-Aug-13	12:25	200	17.3	8.04	0.37	-166	0.5	2.4	--	Clear, No Odor
ML02-4	44.39-44.89	14-May-13	15:00	200	16.5	8.80	0.47	-97	1.0	--	9.69	Clear, No Odor
		17-Jul-13	11:40	200	18.0	8.57	0.95	-46	0.4	2.5	8.18	Slightly turbid, Gray
		01-Aug-13	10:45	180	18.2	7.83	1.04	-310	0.9	3.0	--	Slightly yellow, sulfur degradation odor
		14-Aug-13	11:35	180	17.0	7.94	0.91	-173	0.6	3.0	--	Clear, very slight yellow brown, sulfur degradation odor
		27-Aug-13	13:55	180	17.1	7.80	0.82	-230	0.4	2.7	--	Clear, very slight yellow brown, sulfur degradation odor
ML02-3	54.38-54.88	14-May-13	16:00	200	15.9	9.55	0.77	-119	0.9	--	9.69	Clear, No Odor
		17-Jul-13	12:30	300	17.4	9.17	1.14	-271	0.1	2.5	8.03	Clear, No Odor
		01-Aug-13	12:05	190	17.3	8.97	1.12	-320	0.7	3.0	--	Clear, slight yellow, sulfur degradation odor
		14-Aug-13	13:00	160	17.4	8.94	0.97	-217	0.5	2.5	--	Clear, very slight yellow, sulfur degradation odor
		28-Aug-13	10:10	200	19.3	8.66	0.88	-210	0.4	2.5	--	Slight pale yellow, no odor

**TABLE 2
FIELD PARAMETER RESULTS
Pompton Lakes Works
Pompton Lakes, New Jersey**

Well Identifier	Well Screen Interval (ft bgs)	Date Sampled	Time	Flow Rate (ml/m)	Temperature (°C)	pH	Conductivity (µs)	ORP (mV)	Dissolved Oxygen (mg/L)	Volume Purged (gal)	Water Level (ft btoc)	Comments
ML02-2	64.40-64.90	15-May-13	11:10	200	15.1	8.50	0.80	16	1.3	2.5	9.69	Slightly turbid, gray
		17-Jul-13	13:25	300	17.3	9.10	0.93	-144	0.2	2.5	8.25	Clear, No Odor
		01-Aug-13	15:05	170	17.4	8.69	0.93	-219	1.1	3.5	--	Slight yellow, sulfur degradation odor
		14-Aug-13	14:55	185	18.1	8.84	0.86	-293	0.3	4.0	--	Clear, sulfur degradation odor
		28-Aug-13	11:15	200	18.6	8.52	0.78	-240	0.7	3.0	--	Slight pale yellow, No odor
ML02-7	74.45-74.95	15-May-13	13:20	200	16.8	8.83	1.82	-108	0.9	2.5	9.71	Slightly turbid/gray
		17-Jul-13	14:15	300	16.6	8.97	1.80	-135	0.1	2.5	8.38	Clear, No Odor
		02-Aug-13	10:05	190	18.2	8.38	1.80	-143	0.9	3.5	--	Medium brown to gold, No Odor
		14-Aug-13	16:10	195	18.0	8.89	1.79	-169	0.3	3.5	--	Yellow-gold, sulfur degradation odor
		28-Aug-13	12:10	200	19.3	8.77	1.92	-139	0.4	3.0	--	Amber colored, mineral odor
ML04-1	14.62-15.12	16-May-13	11:00	200	15.6	6.77	0.35	112	1.0	2.5	9.19	Slightly turbid, Gray/brown
		31-Jul-13	11:40	250	18.3	6.71	0.35	134	1.0	6.0	--	Clear, no odor
		27-Aug-13	10:10	200	18.8	6.65	0.39	7	0.5	2.0	--	Clear, no odor
ML04-6	24.69-25.19	16-May-13	12:00	200	16.7	7.49	0.38	-105	0.7	2.5	9.18	Clear, No Odor
		31-Jul-13	13:25	170	18.3	8.29	0.38	-137	0.9	3.0	--	Clear, No Odor
		27-Aug-13	11:10	200	18.3	8.23	0.39	-127	0.4	3.0	--	Clear, No Odor
ML04-5	34.59-35.09	16-May-13	12:55	200	18.3	8.21	0.41	-118	0.5	2.5	9.20	Clear, No Odor
		31-Jul-13	15:15	170	20.7	8.22	0.42	-156	0.7	2.0	--	Clear, No Odor
		27-Aug-13	12:05	200	18.7	8.01	0.49	-156	0.3	3.0	--	Clear, No Odor
ML04-4	44.32-44.82	11-May-13	14:45	160	18.9	8.80	0.47	-165	0.4	3.5	9.20	Silty, gray-black, no odor
		01-Aug-13	10:25	150	16.4	8.26	0.86	-103	1.2	3.0	--	Clear, No Odor
		27-Aug-13	12:55	200	18.3	8.22	1.06	-126	0.4	3.0	--	Slight pale yellow, no odor
ML04-3	54.62-55.12	16-May-13	16:05	200	19.8	9.13	0.80	-130	0.6	2.5	9.19	Gray/turbid
		01-Aug-13	11:50	150	15.7	8.89	0.92	-148	1.0	3.0	--	Slight pale yellow, no odor
		27-Aug-13	13:55	200	19.1	8.97	1.15	-140	0.4	2.5	--	Slight pale yellow, no odor
ML04-2	64.66-65.16	17-May-13	10:25	200	15.3	8.47	1.06	-138	0.6	2.5	9.18	Gray/turbid
		01-Aug-13	14:20	150	16.7	8.59	1.00	-70	0.9	6.0	--	Slight pale yellow, no odor
		27-Aug-13	14:40	200	18.4	8.91	0.90	-87	0.8	3.0	--	Slight pale yellow, no odor
ML04-7	74.75-75.25	17-May-13	11:50	200	15.6	8.91	1.60	-157	0.3	2.5	9.22	Turbid, brown
		01-Aug-13	15:35	150	15.9	8.77	1.58	-198	0.9	3.0	--	Clear, slight sulfur degradation odor
		27-Aug-13	15:30	200	19.1	9.11	1.50	-161	0.3	2.5	--	Slight pale brown, mineral odor

Notes:

- - not available
- °C - degrees Celsius
- ft btoc - feet below top of casing
- GMW - groundwater monitoring well
- µmhos/cm - micromhos per centimeter
- mg/L - milligrams per liter
- mL - milliliters
- ml/m - milliliter per minute
- mV - millivolts
- NTU - Nephelometric Turbidity Units
- ORP - oxidation reduction potential
- TDS - total dissolved solids

**TABLE 3
SELECT TARGET COMPOUND RESULTS - EISB PILOT STUDY
Pompton Lakes Works
Pompton Lakes, New Jersey**

Location	Screen Interval (ft bgs)	Sample Event	Sampling Date	VOCs										DHGs			Other						
				1,1,1 TCA	1,1-DCA	1,1-DCE	1,2-DCA	CT	PCE	TCE	cis-1,2- DCE	trans-1,2- DCE	VC	Ethane	Ethene	Methane	Bromide	Chloride	Sulfate	Sulfide	TOC		
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
128	6.24-26.24	Baseline - May/June 2013	1-May-13	--	--	--	--	--	--	--	--	--	--	--	<1.0	<1.0	<3.0	<2.0	202	17.9	--	--	
		Baseline - May/June 2013	21-May-13	<0.1	<0.1	<0.1	<0.1	<0.1	2.6	4.4	2.6	1.3	<0.1	--	--	--	--	--	--	--	--	--	--
128-I	61.36-71.36	Baseline - May/June 2013	2-May-13	--	--	--	--	--	--	--	--	--	--	5.4	3.7 J	1100	<2.0	84.8	36.2	--	--		
		Baseline - May/June 2013	21-May-13	<1.0	5.4	5.9	2.5 J	<1.0	<1.0	1.7 J	890	200	79	--	--	--	--	--	--	--	--	--	
128-D	125.2-145.2	Baseline - May/June 2013	2-May-13	--	--	--	--	--	--	--	--	--	--	<1.0	1.1 J	190	<2.0	11.8	12.6	--	--		
		Baseline - May/June 2013	21-May-13	<0.1	<0.1	<0.1	4.7	<0.1	<0.1	0.4 J	6.6	7	2.8	--	--	--	--	--	--	--	--	--	--
EW01-UPPER	21.60 - 45.92	Baseline - May/June 2013	16-May-13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.7 J	
		Baseline - May/June 2013	17-May-13	0.2 J	0.2 J	0.3 J	<0.1	<0.1	16	20	29	17	4.3	<1.0	<1.0	26	<0.15	47.9	34.3	<0.054	<0.50	--	
		Biweekly - Mid July 2013	17-Jul-13	<0.1	<0.1	0.2 J	<0.1	<0.1	21	22	17	9.8	0.6	<1.0	<1.0	<3.0	--	--	--	--	--	--	--
		Monthly - July/Aug 2013	2-Aug-13	0.1 J	<0.1	0.2 J	<0.1	<0.1	21	21	20	13	0.8	<1.0	<1.0	<3.0	--	--	--	--	--	--	<0.50
EW01-LOWER	50.69 - 75.00	Baseline - May/June 2013	14-Jun-13	<0.5	2.5	4.6	<0.5	<0.5	0.9 J	43	630	260 J	97	2.3 J	3.7 J	910	<2.0	54.1	43.9	<0.054	17.4	--	
		Biweekly - Mid July 2013	17-Jul-13	<1.0	3.1 J	3.9 J	<1.0	<1.0	22	49	530	200	120	4.8 J	4.9 J	900	--	--	--	--	--	--	
		Monthly - July/Aug 2013	1-Aug-13	<0.5	3.1	3.7	<0.5	<0.5	21	51	550	200	120	6.2	6.5	1000	--	--	--	--	--	5.4	
IW01-UPPER	19.90-44.90	Baseline - May/June 2013	14-May-13	0.1 J	<0.1	0.2 J	<0.1	<0.1	21	25	24	16	0.9	<1.0	<1.0	<3.0	<2.0	60.1	25.8	<0.054 R	2		
IW01-LOWER	49.70-74.20	Baseline - May/June 2013	14-May-13	<0.5	2.2 J	3.7	<0.5	<0.5	0.6 J	22	440	150	79	3.6 J	3.4 J	880	<2.0	--	--	--	5.7		
IW02-UPPER	21.60-45.92	Baseline - May/June 2013	4-Jun-13	0.2 J	<0.1	0.1 J	<0.1	<0.1	19	19	14	7.2	0.4 J	<1.0	<1.0	<3.0	<2.0	26.5	37.1	--	1		
IW02-LOWER	50.69-75.00	Baseline - May/June 2013	15-May-13	<1.0	2.0 J	3.5 J	<1.0	<1.0	<1.0	23	440	150	70	2.6 J	2.4 J	650	<2.0	50.4	41	--	--		
IW03-UPPER	21.10-45.42	Baseline - May/June 2013	15-May-13	0.4 J	0.2 J	0.2 J	<0.1	<0.1	19	17	22	10	2.2	<1.0	<1.0	22	<2.0	77.2	24.4	--	<0.50		
IW03-LOWER	50.19-75.50	Baseline - May/June 2013	17-May-13	<1.0	1.3 J	2.8 J	<1.0	<1.0	<1.0	28	380	140	56	1.7 J	3.0 J	840	<0.075	48.3	42.5	--	7.2		
ML02-1	14.42-14.92	Baseline - May/June 2013	14-May-13	0.4 J	0.2 J	0.1 J	<0.1	<0.1	23	14	41	9.9	5.4	<1.0	<1.0	10 J	<2.0	35	23.2	<0.054 R	--		
		Monthly - July/Aug 2013	31-Jul-13	0.3 J	0.3 J	0.4 J	<0.1	<0.1	23	15	35	17	8.1	--	--	--	--	--	--	--	--	2.7	
ML02-6	24.39-24.89	Baseline - May/June 2013	14-May-13	<0.1	<0.1	0.3 J	<0.1	<0.1	19	22	22	16	1.2	<1.0	<1.0	3.3 J	<2.0	34.6	39.8	<0.054 R	--		
		Monthly - July/Aug 2013	31-Jul-13	<0.1	<0.1	0.3 J	<0.1	<0.1	23	22	22	15	0.9	--	--	--	--	--	--	--	--	0.51 J	
ML02-5	34.36-34.86	Baseline - May/June 2013	14-May-13	0.2 J	0.2 J	0.5	<0.1	<0.1	24	40	45	25	1.8	<1.0	<1.0	5.8	<2.0	13	28.6	0.16 J	--		
		Biweekly - Mid July 2013	17-Jul-13	0.2 J	0.2 J	0.5	<0.1	<0.1	12	30	53	24	5.4	--	--	--	--	--	--	--	--	--	
		Monthly - July/Aug 2013	31-Jul-13	0.2 J	0.2 J	0.5	<0.1	<0.1	34	44	43	19	1.7	--	--	--	--	--	--	--	--	1.5	
ML02-4	44.39-44.89	Baseline - May/June 2013	14-May-13	0.5	0.4 J	1.4	<0.1	<0.1	46	85	89	36	6	<1.0	<1.0	22	<2.0	20.6	43.8	0.14 J	--		
		Biweekly - Mid July 2013	17-Jul-13	<1.0	2.9 J	3.2 J	<1.0	<1.0	6.1 J	44 J	510 J	81 J	61 J	4.6 J	5	840	--	--	--	--	--	--	
		Monthly - July/Aug 2013	1-Aug-13	<0.5	3	3.7	<0.5	<0.5	24	53	530	200	120	5.5	6.5	720	--	--	--	--	--	24.6	
ML02-3	54.38-54.88	Baseline - May/June 2013	14-May-13	<0.1	2.7	2.4	<0.1	<0.1	7.7	52	280	81	46	2.5 J	<1.0	140	<2.0	48.3	39.6	0.59 J	--		
		Biweekly - Mid July 2013	17-Jul-13	<0.5	2.7	2.8	<0.5	<0.5	6.3	33	470	160	99	3.0 J	3.6 J	460	--	--	--	--	--	--	
		Monthly - July/Aug 2013	1-Aug-13	<0.5	3	3.6	<0.5	<0.5	17	49	520	190	120	5.9	6.7	800	--	--	--	--	--	47.1	
ML02-2	64.40-64.90	Baseline - May/June 2013	15-May-13	<1.0	4.3 J	5.3	<1.0	<1.0	1.4 J	10	830	310	140	6.4	4.7 J	730	<2.0	59.2	33.2	<0.054	--		
		Biweekly - Mid July 2013	17-Jul-13	<0.5	1.0 J	1.2 J	<0.5	<0.5	7.3	16	190	65	33	1.1 J	1.1 J	120	--	--	--	--	--	--	
		Monthly - July/Aug 2013	1-Aug-13	<0.2	2.2	2.9	<0.2	<0.2	14	36	370	140	80	4.0 J	4.5 J	420	--	--	--	--	--	48.7	
ML02-7	74.45-74.95	Baseline - May/June 2013	15-May-13	<0.5	1.3 J	1.0 J	<0.5	<0.5	1.9 J	14	190	57	55	4.7 J	13	1900	<2.0	62.4	29.2	<0.054	--		
		Biweekly - Mid July 2013	17-Jul-13	<0.2	1.4	1	<0.2	<0.2	1.1	8.8	150	45	70	2.5 J	6.5	960	--	--	--	--	--	--	
		Monthly - July/Aug 2013	2-Aug-13	<0.5	1.1 J	<0.5	<0.5	<0.5	<0.5	<0.5	72	3.1	120	4.8 J	18	2500	--	--	--	--	--	26	
ML04-1	14.62-15.12	Baseline - May/June 2013	16-May-13	0.3 J	<0.1	<0.1	<0.1	<0.1	20	14	12	2.3	<0.1	<1.0	<1.0	<3.0	<2.0	40.7	23.3	--	--		
		Monthly - July/Aug 2013	31-Jul-13	0.3 J	0.3 J	0.4 J	<0.1	<0.1	21	20	43	19	8.9	--	--	--	--	--	--	--	--	<0.50	
ML04-6	24.69-25.19	Baseline - May/June 2013	16-May-13	<0.1	0.1 J	0.3 J	<0.1	<0.1	22	26	30	16	1	<1.0	<1.0	<3.0	<2.0	19.7	42.3	--	--		
		Monthly - July/Aug 2013	31-Jul-13	<0.1	0.1 J	0.4 J	<0.1	<0.1	24	23	31	18	1.3	--	--	--	--	--	--	--	--	1.5	
ML04-5	34.59-35.09	Baseline - May/June 2013	16-May-13	<0.2	<0.2	0.5 J	<0.2	<0.2	7.8	32	44	23	1.3	<1.0	<1.0	3.4 J	<2.0	30.5	25.9	--	--		
		Monthly - July/Aug 2013	31-Jul-13	<0.1	0.4 J	0.7	<0.1	<0.1	17	32	61	22	12	--	--	--	--	--	--	--	--	2.3	

**TABLE 3
SELECT TARGET COMPOUND RESULTS - EISB PILOT STUDY
Pompton Lakes Works
Pompton Lakes, New Jersey**

Location	Screen Interval (ft bgs)	Sample Event	Sampling Date	VOCs										DHGs			Other				
				1,1,1 TCA	1,1-DCA	1,1-DCE	1,2-DCA	CT	PCE	TCE	cis-1,2- DCE	trans-1,2- DCE	VC	Ethane	Ethene	Methane	Bromide	Chloride	Sulfate	Sulfide	TOC
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
ML04-4	44.32-44.82	Baseline - May/June 2013	16-May-13	0.4 J	0.4 J	1.1 J	<0.3	<0.3	39	70	75	38	4.2	<1.0	<1.0	7.4	<2.0	28.9	37.5	--	--
		Monthly - July/Aug 2013	1-Aug-13	<0.5	2.4 J	2.7	<0.5	<0.5	36	91	350	85	95	4.6 J	5.1	680	--	--	--	--	3.8
ML04-3	54.62-55.12	Baseline - May/June 2013	16-May-13	<0.1	0.3 J	0.6	<0.1	<0.1	1.7	17	64	23	7.7	<1.0	<1.0	110	<2.0	45.3	44.7	--	--
		Monthly - July/Aug 2013	1-Aug-13	<0.5	2.5	3.2	<0.5	<0.5	3.4	72	400	140	88	3.9 J	3.8 J	460	--	--	--	--	4.6
ML04-2	64.66-65.16	Baseline - May/June 2013	17-May-13	<0.2	1.5	1.9	<0.2	<0.2	3.8	24	200	62	45	20	31	4100	<2.0	118	31.9	--	--
		Monthly - July/Aug 2013	1-Aug-13	<1.0	7	7.7	<1.0	<1.0	<1.0	33	1300	430	280	11	16	1700	--	--	--	--	7.9
ML04-7	74.75-75.25	Baseline - May/June 2013	17-May-13	<0.5	1.7 J	1.2 J	<0.5	<0.5	<0.5	4.6	220	35	150	5.4	11	2700	<2.0	64.9	34.5	--	--
		Monthly - July/Aug 2013	1-Aug-13	<0.2	1.7	0.7 J	<0.2	<0.2	<0.2	0.4 J	100	6.3	170	5.7	12	2400	--	--	--	--	16.1

Notes:

- < Less than the laboratory reporting limit shown
- Analyte not measured

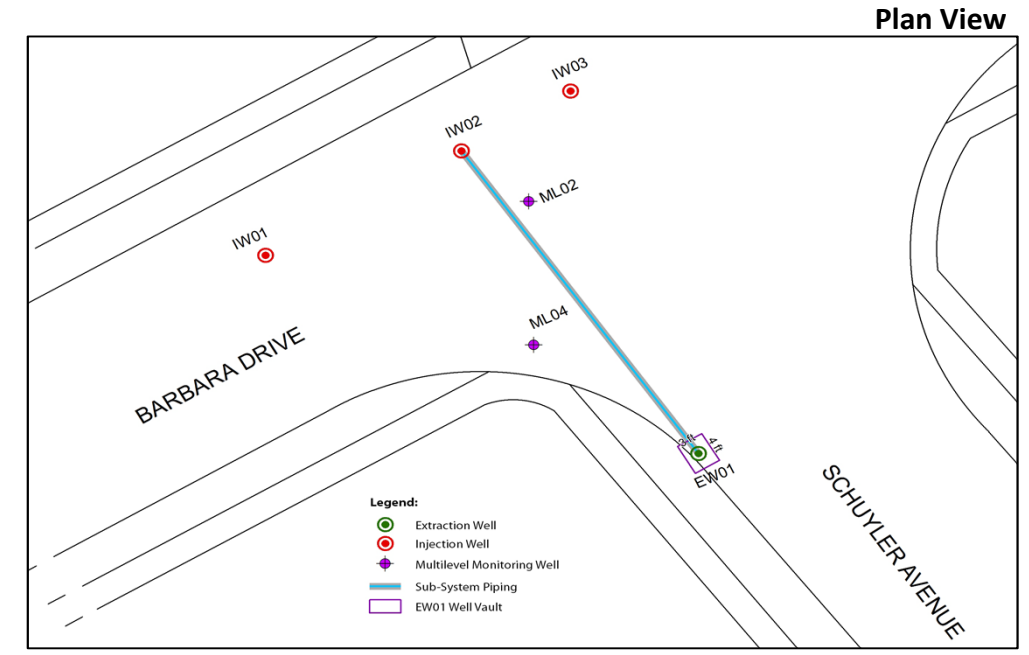
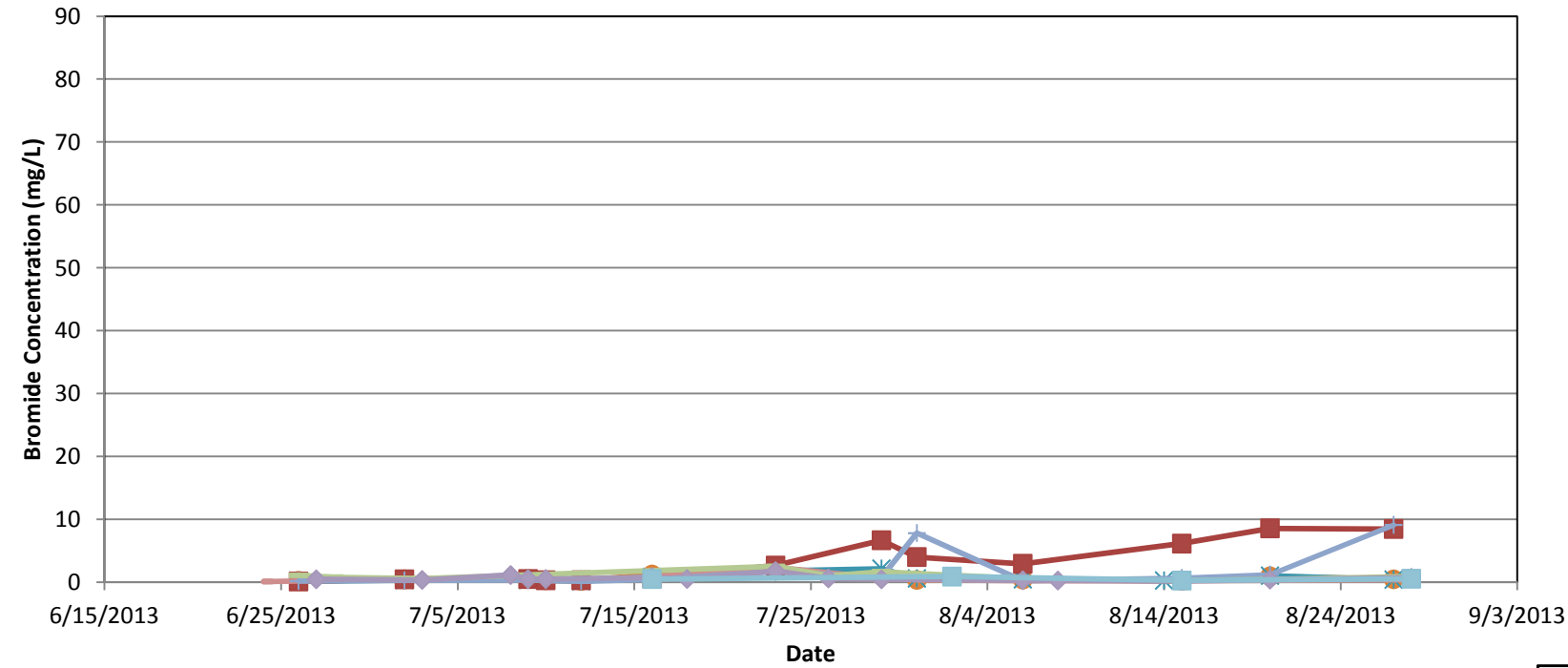
Laboratory-Assigned Qualifiers

- J Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL).
- R Associated MS and/or MSD analysis had relative percent recovery values less than the data rejection level. The reported non-detect result is unusable.

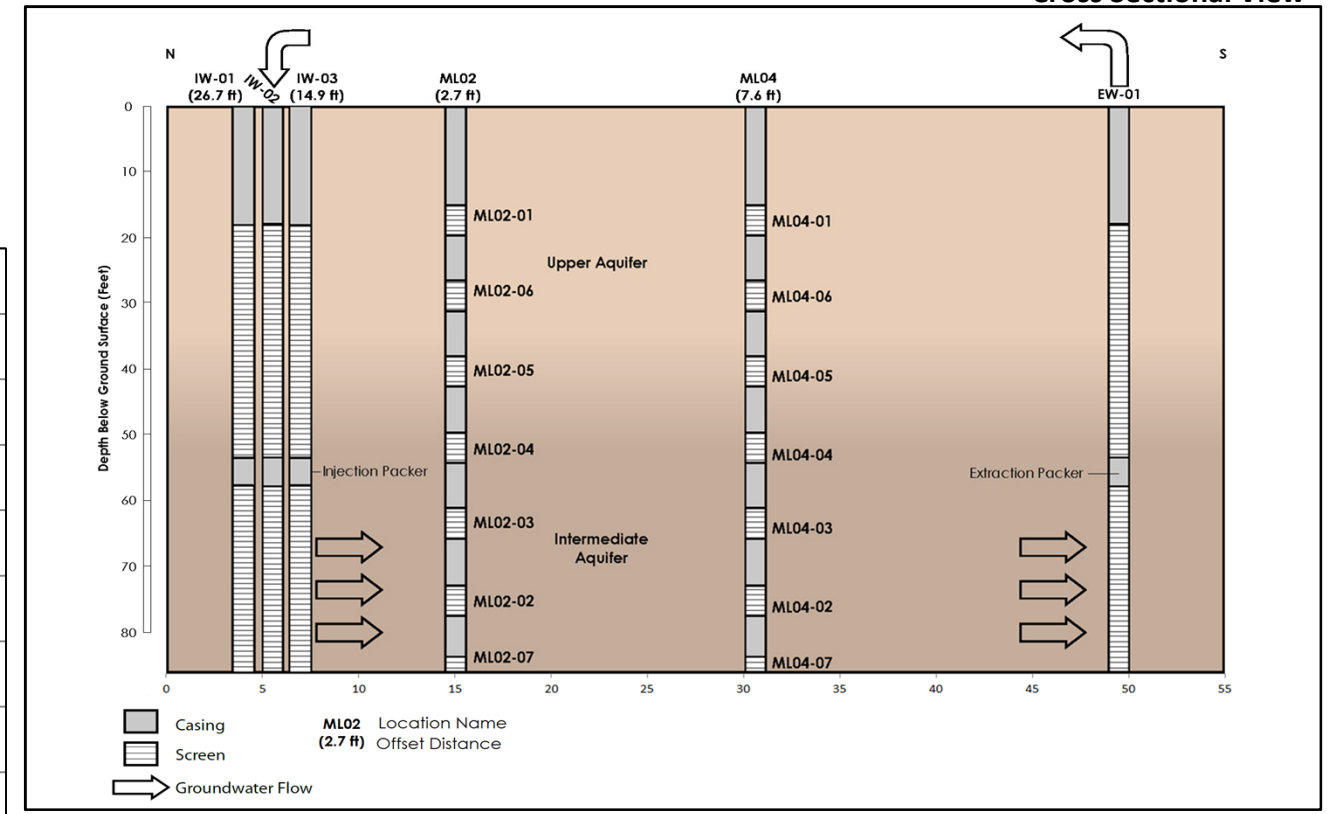
Definitions

- ft bgs feet below ground surface
- CT carbon tetrachloride
- cis-1,2-DCE cis-1,2-dichloroethene
- 1,1-DCA 1,1-dichloroethane
- 1,2-DCA 1,2-dichloroethane
- 1,1-DCE 1,1-dichloroethene
- DHG dissolved hydrocarbon gases
- mg/L milligrams per liter
- µg/L micrograms per liter
- PCE tetrachloroethene
- trans-1,2-DCE trans-1,2-dichloroethene
- 1,1,1-TCA 1,1,1-trichloroethane
- TCE trichloroethene
- TOC total organic carbon
- VC vinyl chloride
- VOC volatile organic compounds

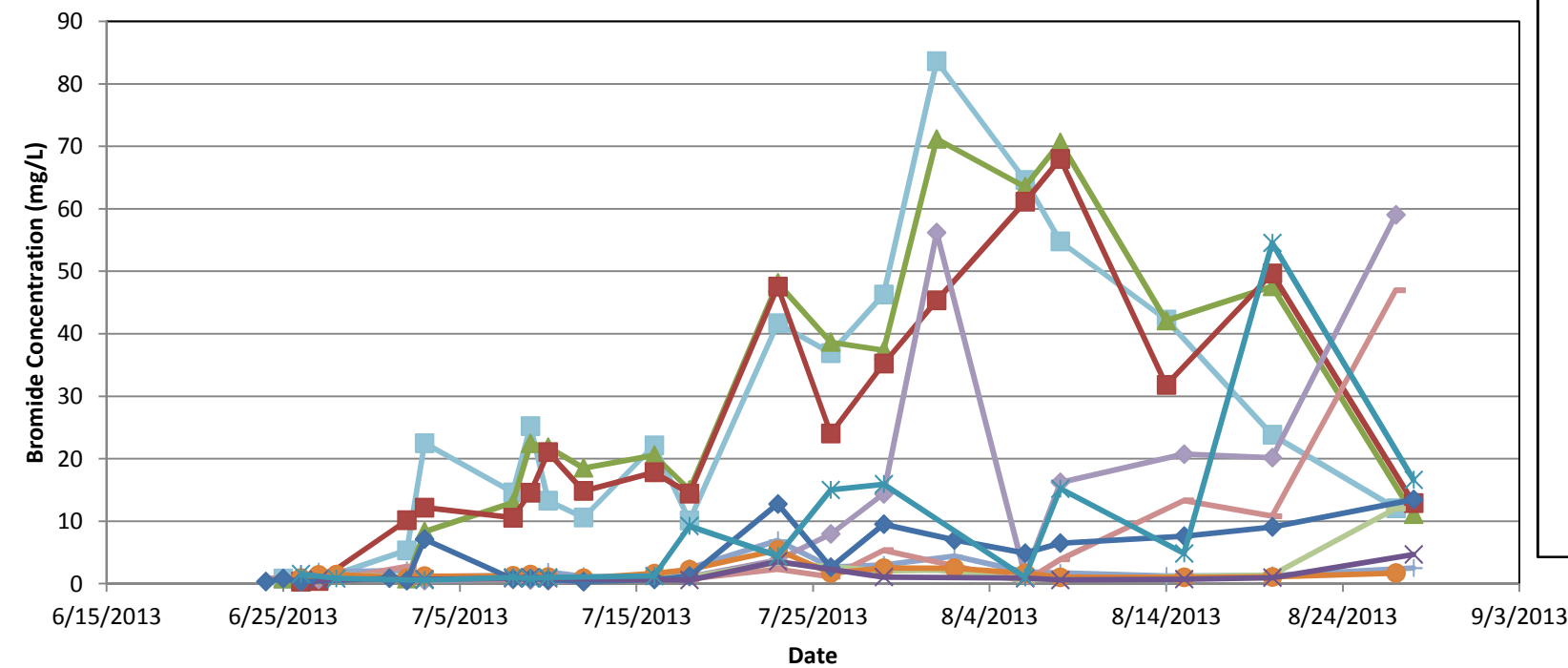
Upper Aquifer



Cross Sectional View



Intermediate Aquifer



Field Measured Bromide Concentrations, Pilot Test
Pompton Lakes Works, Pompton Lakes, New Jersey



Guelph September-2013

Figure
2

P:\P10\Projects\108252_Durham\12818\Phase 2 - E88\Operation\Manual Water Levels\Table 1 Depth to Groundwater Measurements_20130903.xlsx[Table 1