MONITORING AND MAINTENANCE PLAN

GROUNDWATER MONITORING EVENT #1

FORMER IMPERIAL CLEANERS
1233B ALPHARETTA HIGHWAY
ROSWELL, FULTON COUNTY, GEORGIA
HSI SITE NO. 10690

Prepared for Submission to:

Georgia Environmental Protection Division
Hazardous Waste Management Branch
Suite 1066, East Tower
2 Martin Luther King Jr. Drive
Atlanta, Georgia 30334

Prepared by:

AMEC Environment & Infrastructure, Inc.
2677 Buford Highway
Atlanta, Georgia 30324
(404) 873-4761

September 8, 2014

AMEC Project No. 6305-05-0319

September 8, 2014

Mr. Terry Allison
Environmental Protection Division
Hazardous Site Response Program
Floyd Tower East, Suite 1066
2 Martin Luther King, Jr. Blvd.
Atlanta, Georgia 30334

Subject: **Monitoring and Maintenance Plan Groundwater Monitoring Event #1**
Former Imperial Cleaners
1233B Alpharetta Highway
Roswell, Fulton County, Georgia
AMEC Project No. 6305-05-0319

Dear Mr. Allison:

On behalf of PM, Ltd, AMEC Environment & Infrastructure, Inc. (AMEC) respectfully submits this Groundwater Monitoring Report to the Georgia Department of Natural Resources Environmental Protection Division (EPD). This report is intended for the use of PM, Ltd. subject to the contractual terms agreed to for this project and for regulatory submittal. Use of this report for purposes beyond those reasonably intended by PM, Ltd. and AMEC will be at the sole risk of the user.

Ownership of this property has transferred to the Fulton County Board of Education. Therefore, groundwater monitoring is now conducted in accordance with a Monitoring and Maintenance (M&M) Plan for Type 5 Risk Reduction Standards consistent with EPD's letter dated February 5, 2014.

If you have any questions and/or comments regarding the material presented in this report, please contact Chuck Ferry at (404) 817-0107 or by email at ctferry@mactec.com.

Also, per Comment No. 1 in EPD's letter, we have attached a revised Table 8 as an Addendum to this report.

Sincerely,

AMEC ENVIRONMENT & INFRASTRUCTURE, INC.

Stephen R. Foley, P.G.
Senior Geologist

Charles T. Ferry, P.E.
Senior Principal Engineer

cc: Ms. Nancy Shannon, PM, Ltd.
Ms. Joan Sasine, Bryan Cave, LLP

AMEC Environment & Infrastructure, Inc.
2677 Buford Hwy., Atlanta, Georgia 30324
Tel: (404) 873 4761
Fax: (404) 817 0183
www.amec.com

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1.0 PROJECT SUMMARY

Imperial Cleaners was a tenant dry cleaning business located at the Kingscreek Shopping Center between 1991 and 2000. In 2000, on-site dry cleaning operations ceased and the dry cleaning machinery and associated equipment were removed from the building. Imperial Cleaners was the subject of environmental assessments which discovered contamination and resulted in placement of a 3.935-acre portion of the Kingscreek Shopping Center on the Hazardous Site Inventory (HSI) on January 5, 2001, designated as HSI Site Number 10690.

In the spring of 2002, the former dry cleaners space was renovated for an expansion of the adjacent Tuesday Morning retail store. The wall between the former dry cleaner and Tuesday Morning was removed and the former dry cleaner space formed a part of the Tuesday Morning retail showroom. Tuesday Morning vacated the tenant space as of August 2009 and the space remained vacant until its sale to the Fulton County Board of Education (BOE).

A total of 12 groundwater monitoring wells were installed on the subject site during a series of assessments between 2000 and 2006 that revealed groundwater impacts exceeding applicable risk reduction standards (RRS). Analysis of soils inside and outside the dry cleaner space did not reveal soil conditions exceeding the EPD-approved RRS. Therefore, a Corrective Action Plan (CAP) was approved by EPD on January 11, 2007 which addressed the groundwater condition. The CAP included a series of three enhanced fluid recovery (EFR) events, followed by a long term program of monitored natural attenuation for groundwater.

EPD required that monitoring be conducted on a quarterly basis in six wells (MW-2, MW-4, MW-5, MW-7, MW-11 and MW-12) and three surface water sampling locations (SW-1, SW-2 and SW-3) with the results reported to EPD semi-annually for a period of at least two years. The EPD later requested in a letter dated September 9, 2008 that the two deep wells on site (MW-3 and DW-1) also be included in the monitoring program.

On February 20, 2009 EPD issued a letter which requested more extensive soil delineation and assessment of groundwater conditions in the area beneath the building because it was suspected to be a potential source area. The groundwater beneath the building was not able to be sampled during Tuesday Morning's occupancy due to limitations on equipment size and the shallow depth to rock.

In response to EPD's February 2009 letter, an Amendment to the Corrective Action Plan for Groundwater, dated March 20, 2009, was submitted which proposed additional soil and groundwater testing to be conducted within the former dry cleaner space following Tuesday Morning's vacating the property. Deferment of the ninth quarterly monitoring event was also proposed until after the installation of the new wells. EPD approved the amendment in a letter dated June 26, 2009.

In August 2009, nine soil test borings were installed inside the former Tuesday Morning tenant space, three of which were converted to shallow groundwater monitoring wells (MW-13 through MW-15). Soil testing from the borings identified concentrations of PCE which were consistent with previous findings and all below the established Type 4 RRS of 1.2 mg/kg. Groundwater testing from the three interior wells identified only very low concentrations of PCE and its breakdown products in one of the three wells. No VOCs were detected in MW-14, located upgradient of MW-7. Only very low VOC concentrations were detected in MW-13, upgradient of MW-2. The groundwater concentrations were significantly below those detected outside the building and were not indicative of an ongoing source of PCE contamination underneath the building. The results of this assessment were included in the Fifth Semi-Annual Groundwater Monitoring Report, dated October 15, 2009.

Following its review of the report, EPD issued a letter dated February 15, 2010 which requested additional soil sampling and testing in the area outside the building, surrounding MW-7 where the highest groundwater impacts have been consistently recorded. The purpose of this testing was to attempt to locate the source of the groundwater contamination in this area even though previous testing conducted in this area (1993, 2000 and 2001) had identified only low concentrations of PCE in soil. EPD also requested additional analysis of natural attenuation parameters in groundwater and predictive modeling of the groundwater plume. Once again, soil testing from the borings identified concentrations of PCE which were consistent with previous findings and all below the established Type 4 RRS of 1.2 mg/kg.

On October 14, 2010, an application to the Georgia Voluntary Remediation Program (VRP) was submitted to EPD on behalf of PM, Ltd. On November 10, 2011, EPD issued a letter accepting the site into the VRP and establishing November 10 and May 10 as due dates for Groundwater Monitoring reports. Quarterly monitoring continued at the site for two years and four semi-annual VRP progress reports were submitted to EPD. Groundwater fate and transport modeling consistently predicted no impacts to Hog Wallow Creek exceeding in-stream water quality standards.

The Voluntary Investigation and Remediation Plan (VIRP) has been replaced by an approved Monitoring and Maintenance Plan for the assessment of groundwater over three additional semi-annual monitoring events within a reduced monitoring well network of five wells (MW-2, MW-4R, MW-7, MW-11R and DW-1). This report represents the first of the three final monitoring events.

2.0 ADDITIONAL ASSESSMENT ACTIVITIES

The additional assessment activities described herein included a semi-annual groundwater monitoring event conducted within five monitoring wells located in the vicinity of the former Imperial Cleaners.

2.1 OBSERVATIONS

The site is currently under construction for a school. At the time of our site visit on June 27, 2014, the shopping center building had been demolished and most of the building slab had been removed. A portion of the building slab, on which the former Imperial Cleaners was located, remained in place. The site had not yet been graded so the asphalt-paved parking areas remained intact and all wells located outside of the former building remained in place. A follow-up visit was conducted on September 4, 2014 and observations were made from the public right-of-way as the site had been secured. Additional grading had occurred since the June sampling event and the visible asphalt parking areas had been removed. It is not known if the wells in the immediate vicinity of the dry cleaner had been damaged or destroyed as these areas could not be directly observed.

2.2 GROUNDWATER SAMPLING AND ANALYSIS

Three of the selected wells (MW-2, MW-7 and DW-1) are located just outside the back corner of the former dry cleaner space, within the presumed source area. The remaining wells (MW-4R and MW-11R) are located downgradient, near Hog Wallow Creek.

Prior to sampling, each well was purged to remove stagnant water and allow representative formation water to enter the well. The wells were purged using a peristaltic pump and Teflon lined tubing. Water quality parameters were measured during well purging and are summarized on the attached field data sheets. Samples were collected immediately following purging and placed in containers provided by the laboratory, packed on ice and maintained under chain-of-custody control from the time they were collected until they were released to the laboratory. The samples were analyzed for VOCs using EPA Method 8260B. The analytical results of the monitoring event are summarized on the attached Table 1 and on Figure 1, which include summaries of all previous groundwater testing data obtained on site. Complete laboratory analysis reports can be found in Appendix A.

Groundwater testing results obtained from the source area wells during the current monitoring event were generally lower than recent previous results. The concentration of PCE in MW-2 decreased from 200 µg/L to 66 µg/L since the last event conducted in October 2013. The October 2013 PCE concentration was markedly higher than previous data collected since 2010 and was thought to be related to elevated rainfall experienced in 2013. The current PCE concentration is consistent with the July 2013 data. Concentrations of PCE degradation products TCE and cis-1,2-DCE also decreased between October 2013 and June 2014 while cis-1,2-DCE remained stable and vinyl chloride increased.

VOC concentrations in MW-7 had generally been declining since 2010 but increased somewhat between April 2013 and October 2013. These increases were thought to be related to increased rainfall during 2013. The PCE concentration in the current sampling event of 1,000 µg/L was significantly lower than has been measured in recent years. Concentrations of the PCE breakdown products TCE, cis-1,2-DCE and trans-1,2-DCE in MW-7 were also significantly lower than have been measured during recent sampling events.

Low concentrations of PCE and its breakdown products were detected in MW-11R. The concentrations detected were significantly lower than the previous event in October 2013, consistent with data trends for MW-2 and MW-7.

Cis-1,2-DCE was detected in MW-4R at a concentration of 6.5 µg/L, consistent with recent data. This constituent has been sporadically detected in MW-4R at concentrations just above the detection limit for the last four years. No other VOCs were detected in this well which is also consistent with data collected since 2010.

No VOCs were detected in the deep well, DW-1, which is consistent with data collected over the last four years.

2.3 WATER TABLE MEASUREMENTS

Water table measurements were obtained from twelve remaining monitoring wells and indicated a slight general rise in the water table across much of the site compared with 2013 data. Water levels have risen less than one foot in the deeper wells and only slightly in the shallow wells located near the creek. The water table measurements are presented on Table 2 and a potentiometric surface map is attached as Figure 2.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the recent assessment and monitoring activities, we offer the following conclusions and recommendations.

- Groundwater monitoring results indicate concentrations of PCE in MW-2 have decreased significantly compared with the last sampling event while concentrations of degradation products have either remained consistent or increased slightly. These results are consistent with earlier results and indicate that natural attenuation is continuing in the area of MW-2. Total VOC concentrations in MW-7 have decreased significantly during the most recent monitoring period, following a period of increasing VOC concentrations in 2013. The degradation product concentrations present in MW-7 indicate biodegradation of PCE is occurring around this well but at a slower rate than is observed in MW-2.

- VOC concentrations observed in MW-11R, located downgradient of MW-7 continue to indicate significant natural attenuation is occurring along the flow path from the source area around MW-7 to Hog Wallow Creek.

- VOCs were not detected in the deep rock well DW-1 during this sampling event which is consistent with results since 2010.

- Low concentrations of cis-1,2-dichloroethene have been observed in MW-4R sporadically since 2001, including the four most recent sampling events. No other VOCs have been detected in MW-4R since 2010.

- The elevated degradation product concentrations continue to indicate that significant natural attenuation is occurring in the vicinity of MW-2.

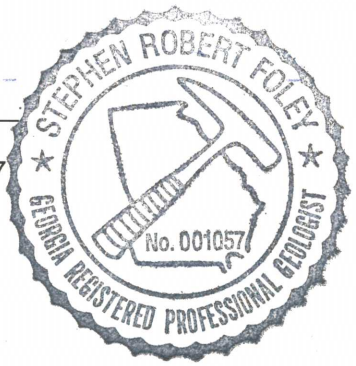
- VOC concentrations detected in MW-4R and MW-11R, adjacent to Hog Wallow Creek, remain well below the concentrations calculated to be protective of the surface water body.

- Per the Monitoring and Maintenance Plan, the next groundwater monitoring event will be conducted in December 2014 and will include the same five monitoring well network as the current sampling event. Please note that it is possible that the schedule may be disrupted by ongoing grading or construction activities. AMEC will keep EPD apprised of any delays encountered.

GROUNDWATER SCIENTIST STATEMENT

I certify that I am a qualified groundwater scientist who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and have sufficient training and experience in groundwater hydrology and related fields, as demonstrated by state registration and completion of accredited university courses, that enable me to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport. I further certify that this report was prepared in conjunction with others working my direction.

Mr. Stephen R. Foley, P.G.
Georgia Registration No. 1057



TABLES

TABLE 1 – SUMMARY OF GROUNDWATER/SURFACE WATER TESTING, µg/l								
Well No.	Sampling Date	PCE	TCE	Trans-1,2-DCE	Cis-1,2-DCE	Vinyl Chloride	Chloroform	Styrene
MW-2	7/00	790	303	171	626	3	<2	<2
	7/8/05	880	440	450	2600	55	<5	<5
	9/11/06	2700	560	98	2200	150	<5	<5
	3/21/07	1200	280	160	2000	620	<5	<5
	7/3/07	1200	140	30	600	710	<5	<5
	8/17/07	250	61	37	540	1100	<5	<5
	11/07	660	220	16	590	660	<5	<5
	1/18/08	370	120	8.8	340	160	<5	<5
	4/29/08	410	150	14	390	310	<5	<5
	8/15/08	510	170	10	260	390	<5	<5
	10/28/08	350	130	12	320	190	<5	<5
	2/27/09	620	230	6.1	300	480	<5	<5
	8/19/09	220	240	7.2	400	190	<5	<5
	12/16/09	160	840	70	1100	43	<5	<5
	3/30/10	270	920	78	790	93	<5	<5
	6/30/10	43	690	83	1200	100	<5	<5
	2/9/12	190	230	6.9	380	40	<5	<5
	4/19/12	190	130	<5	170	47	<5	<5
	7/18/12	190	190	<5	190	53	<5	<5
	10/17/12	180	140	<5	190	77	<5	<5
	2/8/13	140	190	<5	200	<2	<5	<5
	2/8/13(dup)	180	110	<5	100	40	<5	<5
	4/18/13	28	140	8.8	570	63	<5	<5
	7/26/13	66	170	11	520	62	<5	<5
	10/16/13	200	54	17	590	130	<5	<5
	6/27/14	66	39	19	490	180	<5	<5
	6/27/14 (dup)	62	39	18	490	190	<5	<5
MW-3	8/15/01	<2	<2	<2	<2	<2	10	<2
	7/13/05	<5	<5	<5	<5	<2	<5	<5
	10/28/08	<5	<5	<5	<5	<2	<5	<5
	10/28/08(dup)	<5	<5	<5	<5	<2	<5	<5
	2/27/09	<5	<5	<5	<5	<2	<5	<5
	8/19/09	<5	<5	<5	<5	<2	<5	<5
	12/16/09	<5	<5	<5	<5	<2	<5	<5
	3/30/10	6.4	<5	<5	<5	<2	<5	<5
	6/30/10	<5	<5	<5	<5	<2	<5	<5
	6/30/10 (dup)	<5	<5	<5	<5	<2	<5	<5
	2/8/12	<5	<5	<5	<5	<2	<5	<5
	4/19/12	<5	<5	<5	<5	<2	<5	<5
	7/18/12	<5	<5	<5	<5	<2	<5	<5
	10/17/12	<5	<5	<5	<5	<2	<5	<5
	2/7/13	<5	<5	<5	<5	<2	<5	<5
	4/18/13	<5	<5	<5	<5	<2	<5	<5
	7/26/13	<5	<5	<5	<5	<2	<5	<5
	10/15/13	<5	<5	<5	<5	<2	<5	<5
MW-4	8/15/01	3	<2	<2	10	<2	<2	<2
	7/13/05	15	<5	<5	<5	<2	<5	<5
	9/11/06	<5	<5	<5	14	2	<5	<5
	3/21/07	5.9	<5	<5	<5	<2	<5	<5
MW-4R	7/3/07	6.9	<5	<5	6.9	<2	<5	<5
	11/07	8.4	<5	<5	<5	<2	<5	<5
	1/18/08	<5	<5	<5	<5	<2	<5	<5
	4/29/08	<5	<5	<5	<5	<2	<5	<5
	8/15/08	No Sample	No Sample	No Sample	No Sample	No Sample	No Sample	No Sample
	10/28/08	<5	<5	<5	<5	<2	<5	<5
	2/27/09	<5	<5	<5	<5	<2	<5	<5
	8/19/09	<5	<5	<5	<5	<2	<5	<5
	12/16/09	5.8	<5	<5	<5	<2	<5	<5
	3/30/10	<5	5.8	<5	9.8	<2	<5	<5
	6/30/10	<5	6.5	<5	9.8	<2	<5	<5
	2/8/12	<5	<5	<5	<5	<2	<5	<5
	2/8/12	<5	<5	<5	8.0	<2	<5	<5
	4/19/12	<5	<5	<5	<5	<2	<5	<5
	7/18/12	<5	<5	<5	6.4	<2	<5	<5
	10/17/12	<5	<5	<5	6.6	<2	<5	<5
	2/8/13	<5	<5	<5	<5	<2	<5	<5
	4/19/13	<5	<5	<5	<5	<2	<5	<5
	7/25/13	<5	<5	<5	5.7	<2	<5	<5
	7/25/13 (dup)	<5	<5	<5	5.7	<2	<5	<5
	8/15/13	<5	<5	<5	7.0	<2	<5	<5
	6/27/14	<5	<5	<5	6.5	<2	<5	<5

TABLE 1 – SUMMARY OF GROUNDWATER/SURFACE WATER TESTING, µg/l								
Well No.	Sampling Date	PCE	TCE	Trans-1,2-DCE	Cis-1,2-DCE	Vinyl Chloride	Chloroform	Styrene
MW-5	8/15/01	<2	<2	<2	<2	<2	<2	<2
	7/8/05	<5	<5	<5	<5	<2	<5	<5
	3/21/07	<5	<5	<5	<5	<2	<5	<5
	7/3/07	<5	<5	<5	<5	<2	<5	<5
	11/07	<5	<5	<5	<5	<2	<5	<5
	1/18/08	<5	<5	<5	<5	<2	<5	<5
	4/29/08	<5	<5	<5	<5	<2	<5	<5
	8/15/08	<5	<5	<5	<5	<2	<5	<5
	10/28/08	<5	<5	<5	<5	<2	<5	<5
	2/27/09	<5	<5	<5	<5	<2	<5	<5
	2/27/09 (dup)	<5	<5	<5	<5	<2	<5	<5
	8/19/09	<5	<5	<5	<5	<2	<5	<5
	12/16/09	<5	<5	<5	<5	<2	<5	<5
	3/30/10	<5	<5	<5	<5	<2	<5	<5
	6/30/10	<5	<5	<5	<5	<2	<5	<5
	2/9/12	<5	<5	<5	<5	<2	<5	<5
	4/19/12	<5	<5	<5	<5	<2	<5	<5
	7/18/12	<5	<5	<5	<5	<2	<5	<5
	10/17/12	<5	<5	<5	7.0	<2	<5	<5
	10/17/12 (dup)	<5	<5	<5	5.9(dup)	<2	<5	<5
	2/8/13	<5	<5	<5	<5	<2	<5	<5
	4/19/13	<5	<5	<5	<5	<2	<5	<5
	7/26/13	<5	<5	<5	<5	<2	<5	<5
	10/16/13	<5	<5	<5	<5	<2	<5	<5
MW-6	3/14/02	<2	<2	<2	<2	<2	<2	<2
	7/8/05	<5	<5	<5	<5	<5	<5	<5
MW-7	3/14/02	830	130	18	45	<2	<2	<5
	7/8/05	1000	180	18	67	<2	<5	<5
	9/11/06	1800	260	58	100	<2	<5	<5
	3/21/07	2200	270	30	98	<2	<5	<5
	7/3/07	2900	210	37	87	<2	<5	<5
	7/3/07 (dup)	2400	200	29	96	<2	<5	<5
	8/17/07	1400	85	<5	43	<2	<5	<5
	11/07	1900	240	27	180	<2	<5	<5
	11/07 (dup)	1600	280	23	110	<2	<5	<5
	1/18/08	1700	130	14	85	<2	<5	<5
	1/18/08 (dup)	1800	140	11	70	<2	<5	<5
	4/29/08	3100	220	11	75	<2	<5	<5
	4/29/08 (dup)	3100	190	12	84	<2	<5	<5
	8/15/08	2100	190	6	91	<2	<5	<5
	10/28/08	2100	350	12	100	<2	<5	<5
	2/27/09	1800	370	9.9	120	<2	<5	<5
	8/19/09	2900	370	13	89	<2	<5	<5
	12/16/09	4400	680	47	250	<2	<5	<5
	3/30/10	3800	560	47	210	<2	<5	<5
	6/30/10	4800	830	69	280	<2	<5	<5
	2/9/12	2900	470	36	220	<2	<5	<5
	4/19/12	3700	530	33	210	<2	<5	<5
	7/18/12	2500	330	15	120	<2	<5	<5
	10/17/12	2000	360	5.7	89	<2	<5	<5
	2/7/13	2000	530	14	120	<2	<5	<5
	4/18/13	3000	560	36	160	<2	<5	<5
	7/26/13	3400	620	41	210	<2	<5	<5
	8/16/13	4000	680	41	200	<2	<5	<5
	6/27/14	1000	190	6.3	73	<2	<5	<5
MW-8	3/14/02	<2	<2	<2	<2	<2	<2	<2
	7/8/05	<5	<5	<5	<5	<2	<5	<5
MW-9	3/14/02	<2	<2	<2	<2	<2	7	<2
	7/8/05	<5	<5	<5	<5	<2	<5	<5
MW-10	3/14/02	<2	<2	<2	<2	<2	<2	<2
	7/8/05	<5	<5	<5	<5	<5	<5	<5
MW-11	4/4/02	18	18	4	28	2	<2	<2
	7/8/05	<5	<5	<5	<5	<2	<5	<5
	3/21/07	<5	<5	<5	<5	<2	<5	<5

TABLE 1 – SUMMARY OF GROUNDWATER/SURFACE WATER TESTING, µg/l								
Well No.	Sampling Date	PCE	TCE	Trans-1,2-DCE	Cis-1,2-DCE	Vinyl Chloride	Chloroform	Styrene
MW-11R	7/3/07	<5	<5	<5	5.6	<2	<5	<2
	11/07	<5	<5	<5	<5	<2	<5	<5
	1/18/08	<5	<5	<5	5.5	<2	<5	<5
	4/29/08	<5	8.6	<5	26	2.2	<5	<5
	8/15/08	<5	<5	<5	<5	<2	<5	<5
	10/28/08	<5	<5	<5	<5	<2	<5	<5
	2/27/09	<5	<5	<5	7.6	<2	<5	<5
	8/19/09	<5	<5	<5	<5	<2	<5	<5
	12/16/09	<5	<5	<5	<5	<2	<5	<5
	3/30/10	110	65	11	170	5.7	<5	<5
	6/30/10	No Sample	No Sample	No Sample	No Sample	No Sample	No Sample	No Sample
	2/8/12	92	81	14	210	<2	<5	<5
	4/19/12	26	92	13	260	10	<5	<5
	7/18/12	No Sample	No Sample	No Sample	No Sample	No Sample	No Sample	No Sample
	10/17/12	<5	<5	<5	<5	6.6	<5	<5
	2/8/13	57	72	5.4	120	<2	<5	<5
	4/19/13	57	160	13	190	3.4	<5	<5
	7/25/13	No Sample	No Sample	No Sample	No Sample	No Sample	No Sample	No Sample
	10/15/13	62	151	11	211	3.1	<5	<5
	6/27/14	13	17	5.3	62	11	<5	<5
MW-12	6/12/02	<2	<2	<2	<2	<2	<2	<2
	7/13/05	<5	<5	<5	<5	<2	<5	<5
	3/21/07	<5	<5	<5	<5	<2	<5	<5
MW-12R	7/3/07	<5	<5	<5	<5	<2	<5	<5
	11/07	<5	<5	<5	<5	<2	<5	<5
	1/18/08	<5	<5	<5	<5	<2	<5	<5
	4/29/08	<5	<5	<5	<5	<2	<5	<5
	8/15/08	<5	<5	<5	<5	<2	<5	<5
	10/28/08	<5	<5	<5	<5	<2	<5	<5
	2/27/09	<5	<5	<5	<5	<2	<5	<5
	8/19/09	<5	<5	<5	<5	<2	<5	<5
	12/16/09	<5	<5	<5	<5	<2	<5	<5
	3/30/10	<5	<5	<5	<5	<2	<5	<5
	6/30/10	<5	<5	<5	<5	<2	<5	<5
	2/8/12	<5	<5	<5	<5	<2	<5	<5
	4/19/12	<5	<5	<5	<5	<2	<5	<5
	7/18/12	<5	<5	<5	<5	<2	<5	<5
	10/17/12	<5	<5	<5	<5	<2	<5	<5
	2/8/13	<5	<5	<5	<5	<2	<5	<5
	4/19/13	<5	<5	<5	<5	<2	<5	<5
	7/26/13	<5	<5	<5	<5	<2	<5	<5
	10/15/13	<5	<5	<5	<5	<2	<5	<5
DW-1	3/22/06	<5	<5	<5	<5	<2	<5	<5
	10/28/08	6.6	<5	<5	<5	<2	<5	<5
	2/27/09	8.5	<5	<5	<5	<2	<5	<5
	8/19/09	<5	<5	<5	<5	<2	<5	<5
	12/16/09	<5	<5	<5	<5	<2	<5	<5
	12/16/09 (dup)	<5	<5	<5	<5	<2	<5	<5
	3/30/10	26	<5	<5	<5	<2	<5	<5
	3/30/10 (dup)	27	<5	<5	<5	<2	<5	<5
	6/30/10	34	6.4	<5	<5	<2	<5	<5
	2/9/12	<5	<5	<5	<5	<2	<5	<5
	4/19/12	<5	<5	<5	<5	<2	<5	<5
	7/18/12	5.8	<5	<5	<5	<2	<5	<5
	10/17/12	<5	<5	<5	<5	<2	<5	<5
	2/7/13	<5	<5	<5	<5	<2	<5	<5
	4/18/13	<5	<5	<5	<5	<2	<5	<5
	4/18/13(dup)	<5	<5	<5	<5	<2	<5	<5
	7/26/13	<5	<5	<5	<5	<2	<5	<5
	10/15/13	<5	<5	<5	<5	<2	<5	<5
	6/27/14	<5	<5	<5	<5	<2	<5	<5
MW-13	8/19/09	43	9.5	<5	6.3	<2	<5	<5
MW-14	8/19/09	<5	<5	<5	<5	<2	<5	<5
	8/19/09 (dup)	<5	<5	<5	<5	<2	<5	<5
MW-15	8/19/09	<5	<5	<5	<5	<2	<5	<5

TABLE 1 – SUMMARY OF GROUNDWATER/SURFACE WATER TESTING, µg/l								
Well No.	Sampling Date	PCE	TCE	Trans-1,2-DCE	Cis-1,2-DCE	Vinyl Chloride	Chloroform	Styrene
MW-16	2/13/12	340	160	85	510	2.3	<5	<5
	4/19/12	220	55	19	130	<2	<5	<5
	4/19/12 (dup)	190	57	20	140	<2	<5	<5
	7/18/12	180	38	7.6	96	<2	<5	<5
	10/17/12	150	60	5.4	100	<2	<5	<5
	2/7/13	170	69	5.1	74	<2	<5	<5
	4/18/13	180	60	7.8	72	<2	<5	<5
	7/26/13	180	63	7.9	80	<2	<5	<5
	10/15/13	210	100	16	110	<2	<5	<5
SW-1	8/15/01	<5	<5	<5	<5	<2	<5	<5
	3/21/07	<5	<5	<5	<5	<2	<5	<5
	7/3/07	<5	<5	<5	<5	<2	<5	<5
	11/07	<5	<5	<5	<5	<2	<5	<5
	1/18/08	<5	<5	<5	<5	<2	<5	<5
	4/29/08	<5	<5	<5	<5	<2	<5	<5
	8/15/08	<5	<5	<5	<5	<2	<5	<5
	10/28/08	<5	<5	<5	<5	<2	<5	<5
	2/27/09	<5	<5	<5	<5	<2	<5	<5
	8/19/09	<5	<5	<5	<5	<2	<5	<5
	12/16/09	<5	<5	<5	<5	<2	<5	<5
	3/30/10	<5	<5	<5	<5	<2	<5	5.1
	6/30/10	<5	<5	<5	<5	<2	<5	<5
	2/8/12	<5	<5	<5	<5	<2	<5	<5
	4/19/12	<5	<5	<5	<5	<2	<5	<5
	7/19/12	<5	<5	<5	<5	<2	<5	<5
	10/17/12	<5	<5	<5	<5	<2	<5	<5
	2/8/13	<5	<5	<5	<5	<2	<5	<5
	4/19/13	<5	<5	<5	<5	<2	<5	<5
	7/26/13	<5	<5	<5	<5	<2	<5	<5
	10/16/13	<5	<5	<5	<5	<2	<5	<5
SW-2	8/15/01	<5	<5	<5	<5	<2	<5	<5
	3/21/07	<5	<5	<5	<5	<2	<5	<5
	7/3/07	<5	<5	<5	<5	<2	<5	<5
	11/07	<5	<5	<5	<5	<2	<5	<5
	1/18/08	<5	<5	<5	<5	<2	<5	<5
	4/29/08	<5	<5	<5	<5	<2	<5	<5
	8/15/08	<5	<5	<5	<5	<2	<5	<5
	10/28/08	<5	<5	<5	<5	<2	<5	<5
	2/27/09	<5	<5	<5	<5	<2	<5	<5
	8/19/09	<5	<5	<5	<5	<2	<5	<5
	12/16/09	<5	<5	<5	<5	<2	<5	<5
	3/30/10	<5	<5	<5	<5	<2	<5	5.6
	6/30/10	<5	<5	<5	<5	<2	<5	<5
	2/8/12	<5	<5	<5	<5	<2	<5	<5
	4/19/12	<5	<5	<5	<5	<2	<5	<5
	7/19/12	<5	<5	<5	<5	<2	<5	<5
	10/17/12	<5	<5	<5	<5	<2	<5	<5
	2/8/13	<5	<5	<5	<5	<2	<5	<5
	4/19/13	<5	<5	<5	<5	<2	<5	<5
	7/26/13	<5	<5	<5	<5	<2	<5	<5
	10/16/13	<5	<5	<5	<5	<2	<5	<5

TABLE 1 – SUMMARY OF GROUNDWATER/SURFACE WATER TESTING, µg/l								
Well No.	Sampling Date	PCE	TCE	Trans-1,2-DCE	Cis-1,2-DCE	Vinyl Chloride	Chloroform	Styrene
SW-3	7/8/05	<5	<5	<5	<5	<2	<5	<5
	3/2107	<5	<5	<5	<5	<2	<5	<5
	7/3/07	<5	<5	<5	<5	<2	<5	<5
	11/07	<5	<5	<5	<5	<2	<5	<5
	1/18/08	<5	<5	<5	<5	<2	<5	<5
	4/29/08	<5	<5	<5	<5	<2	<5	<5
	8/15/08	<5	<5	<5	<5	<2	<5	<5
	10/28/08	<5	<5	<5	<5	<2	<5	<5
	2/27/09	<5	<5	<5	<5	<2	<5	<5
	8/19/09	<5	<5	<5	<5	<2	<5	<5
	12/16/09	<5	<5	<5	<5	<2	<5	<5
	3/30/10	<5	<5	<5	<5	<2	<5	5.6
	6/30/10	<5	<5	<5	<5	<2	<5	<5
	2/8/12	<5	<5	<5	<5	<2	<5	<5
	4/19/12	<5	<5	<5	<5	<2	<5	<5
	7/19/12	<5	<5	<5	<5	<2	<5	<5
	10/17/12	<5	<5	<5	<5	<2	<5	<5
	2/8/13	<5	<5	<5	<5	<2	<5	<5
	4/19/13	<5	<5	<5	<5	<2	<5	<5
	7/26/13	<5	<5	<5	<5	<2	<5	<5
	10/16/13	<5	<5	<5	<5	<2	<5	<5
	10/16/13 (dup)	<5	<5	<5	<5	<2	<5	<5

µg/l - micrograms per liter

TABLE 2 – MONITORING WELL DATA, 6/27/14

Well No.	Well Depth, BGS, Ft.	Screened Interval, Ft.	Ground Surface Elevation, Ft.	Top of Casing Elevation, Ft.	Depth to Water, TOC Ft.	Water Table Elevation, Ft.	Material Monitored
MW-2	24	14 - 24	1027.15	1026.80	22.12	1004.68	Soil
MW-3	52	47 - 52	1026.99	1026.83	24.06	1002.77	Bedrock
MW-4R	7.25	5 - 8	1006.87	1009.62	8.80	1000.82	Soil
MW-5	6	4 – 7	1005.06	1007.51	6.73	1000.78	Soil
MW-6	33	23 – 33	1030.35	1030.08	24.02	1006.06	Soil
MW-7	33	23 -33	1029.91	1029.59	24.90	1004.69	Transitional Zone
MW-8	21	11 - 21	1029.96	1029.61	12.97	1016.64	Soil
MW-9	30	20 - 30	1027.69	1027.44	22.87	1004.57	Soil
MW-11R	5.5	3 – 5.5	1005.32	1006.12	5.09	1001.03	Soil
MW-12R	5.5	3 – 5.5	1003.57	1004.82	3.90	1000.92	Soil
MW-16	33	23 – 33	1029.08	1028.69	25.04	1003.65	Transitional Zone
DW-1	55.5	50.5 – 55.5	1029.76	1029.46	24.47	1004.99	Bedrock

BGS - Below Ground Surface
TOC - Top of Casing

FIGURES

M:\oldUdrive\Projects\Imperial Cleaners\Groundwater Test Results – June 2014.dwg – GW Results 7–13 & 10–13 07/24/2014

DW–1	3/06	3/06 (DUP)	10/08	2/09	8/09	12/09	12/09 (DUP)	3/10	3/10 (DUP)	6/10
PCE	<5	<5	6.6	8.5	<5	<5	<5	26	27	34
TCE	<5	<5	<5	<5	<5	<5	<5	<5	<5	6.4
	2/12	4/12	7/12	10/12	2/13	4/13	4/13 (DUP)	7/13	10/13	6/14
PCE	<5	<5	5.8	<5	<5	<5	<5	<5	<5	<5
TCE	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

MW–8	3/02	7/05
VOCs	ND	ND

MW–6	3/02	7/05
VOCs	ND	ND

MW–15	8/09
VOCs	ND

MW–14	8/09	8/09 (DUP)
VOCs	ND	ND

MW–13	8/09
PCE	43
TCE	9.5
CIS–1,2–DCE	6.3

MW–7	3/02	7/05	9/06	3/07	7/07	7/07 (DUP)	8/07	11/07	11/07 (DUP)	1/08	1/08 (DUP)	4/08	4/08 (DUP)	8/08	10/08
PCE	830	1000	1800	2200	2900	2400	1400	1900	1600	1700	1800	3100	3100	2100	2100
TCE	130	180	260	270	210	200	85	240	280	130	140	220	190	190	350
CIS–1,2–DCE	45	67	100	98	87	96	43	180	110	85	70	75	84	91	100
TRANS–1,2–DCE	18	18	58	30	17	29	<5	27	23	14	11	11	12	6.0	12
	2/09	8/09	12/09	3/10	6/10	2/12	4/12	7/12	10/12	2/13	4/13	7/13	8/13	6/14	
PCE	1800	2900	4400	3800	4800	2900	3700	2500	2000	2000	3000	3400	4000	1000	
TCE	370	370	680	560	830	470	530	330	360	530	560	620	680	190	
CIS–1,2–DCE	120	89	250	210	280	220	210	120	89	120	160	210	200	73	
TRANS–1,2–DCE	9.9	13	47	47	69	36	33	15	5.7	14	36	41	41	6.3	

MW–10	3/02	7/05
VOCs	ND	ND

SW–1	8/01	3/07	7/07	11/07	1/08	4/08	8/08	10/08	2/09	8/09	12/09
STYRENE	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	3/10	6/10	2/12	4/12	7/12	10/12	2/13	4/13	7/13	10/13	
STYRENE	5.1	<5	<5	<5	<5	<5	<5	<5	<5	<5	

MW–2	7/00	7/05	9/06	3/07	7/07	8/07	11/07	1/08	4/08	8/08	10/08	2/09	8/09	12/09
PCE	790	880	2700	1200	1200	250	660	370	410	510	350	620	220	160
TCE	303	440	560	280	140	61	220	120	150	170	130	230	240	840
CIS–1,2–DCE	626	2600	2200	2000	600	540	590	340	390	260	320	300	400	1100
TRANS–1,2–DCE	171	450	98	160	30	37	16	8.8	14	10	12	6.1	7.2	70
VC	3	55	150	620	710	1100	660	160	310	390	190	480	190	43
	3/10	6/10	2/12	4/12	7/12	10/12	2/13	2/13 (DUP)	4/13	7/13	10/13	6/14	6/14 (DUP)	
PCE	270	43	190	190	190	180	140	180	28	66	200	66	62	
TCE	920	690	230	130	190	140	190	110	140	170	54	39	39	
CIS–1,2–DCE	790	1200	380	170	190	190	200	100	570	520	590	490	490	
TRANS–1,2–DCE	78	83	6.9	<5	<5	<5	<5	<5	8.8	11	17	19	18	
VC	93	100	40	44	53	77	<2	40	63	62	130	180	190	

MW–16	2/12	4/12	4/12 (DUP)	7/12	10/12	2/13	4/13	7/13	10/13
PCE	340	220	190	180	150	170	180	180	210
TCE	160	55	57	38	60	69	60	63	100
CIS–1,2–DCE	510	130	140	96	100	74	72	80	110
TRANS–1,2–DCE	85	19	20	7.6	5.4	5.1	7.8	7.9	16
VC	2.3	<2	<2	<2	<2	<2	<2	<2	<2

MW–3	7/01	7/05	7/05 (DUP)	10/08	10/08 (DUP)	2/09	8/09	12/09	3/10	6/10
CHLOROFORM	10	<5	<5	<5	<5	<5	<5	<5	<5	<5
PCE	<5	<5	<5	<5	<5	<5	<5	<5	6.4	<5
	6/10 (DUP)	2/12	4/12	7/12	10/12	2/13	4/13	7/13	10/13	
CHLOROFORM	<5	<5	<5	<5	<5	<5	<5	<5	<5	
PCE	<5	<5	<5	<5	<5	<5	<5	<5	<5	

MW–9	3/02	7/05
CHLOROFORM	7	<5
VOCS		ND

SW–3	7/05	3/07	7/07	11/07	1/08	4/08	8/08	10/08	2/09	8/09	12/09
STYRENE	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
		3/10	6/10	2/12	4/12	7/12	10/12	2/13	4/13	7/13	10/13
STYRENE		5.6	<5	<5	<5	<5	<5	<5	<5	<5	<5

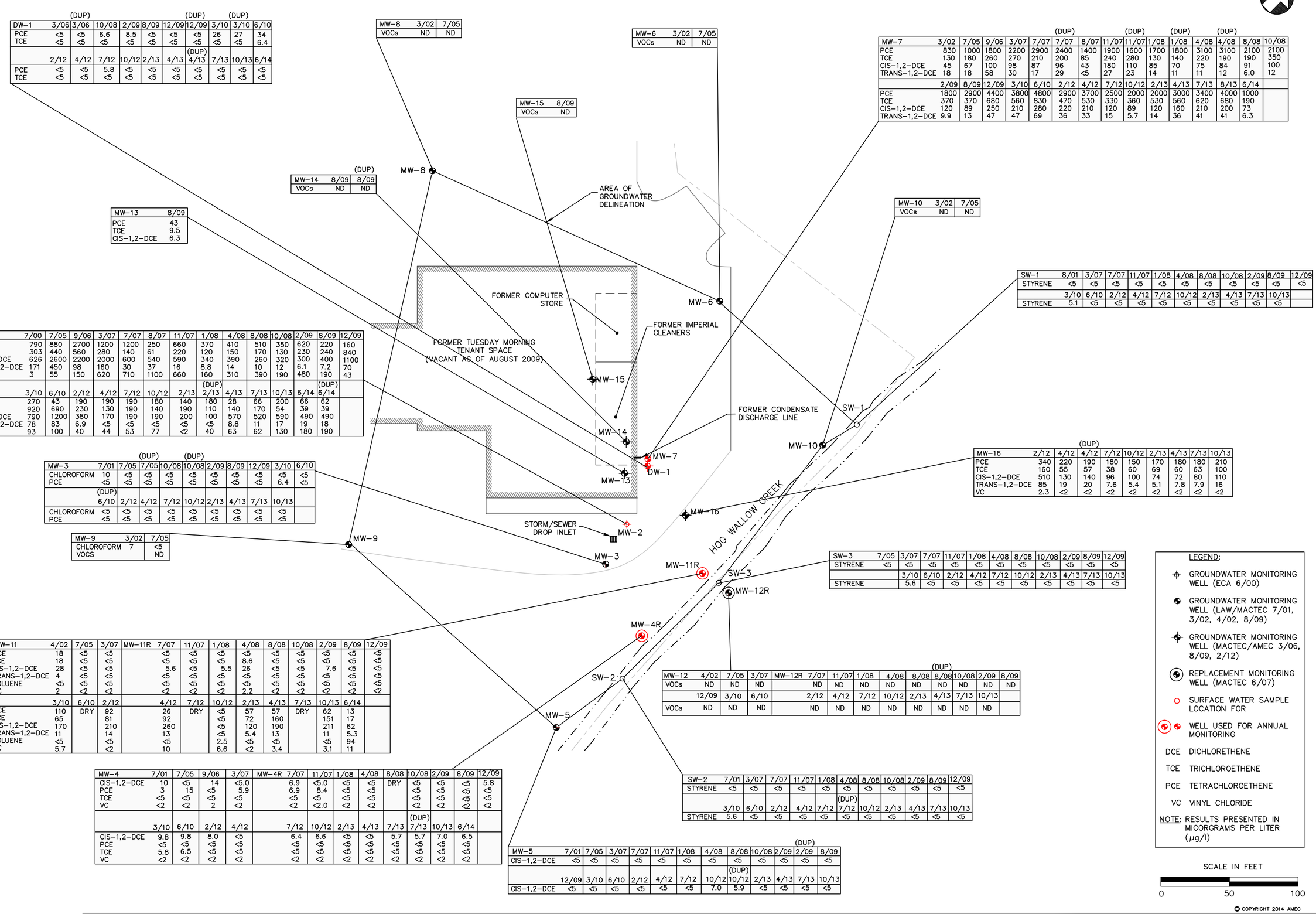
MW–11	4/02	7/05	3/07	MW–11R	7/07	11/07	1/08	4/08	8/08	10/08	2/09	8/09	12/09
PCE	18	<5	<5		<5	<5	<5	8.6	<5	<5	<5	<5	<5
TCE	18	<5	<5		<5	<5	<5	26	<5	<5	<5	<5	<5
CIS–1,2–DCE	28	<5	<5		5.6	<5	5.5	<5	<5	<5	7.6	<5	<5
TRANS–1,2–DCE	4	<5	<5		<5	<5	<5	<5	<5	<5	<5	<5	<5
TOLUENE	<5	<5	<5		<5	<5	<5	<5	<5	<5	<5	<5	<5
VC	2	<2	<2		<2	<2	<2	2.2	<2	<2	<2	<2	<2
	3/10	6/10	2/12		4/12	7/12	10/12	2/13	4/13	7/13	10/13	6/14	
PCE	110	DRY	92		26	DRY	<5	57	57	DRY	62	13	
TCE	65		81		92		<5	72	160		151	17	
CIS–1,2–DCE	170		210		260		<5	120	190		211	62	
TRANS–1,2–DCE	11		14		13		<5	5.4	13		11	5.3	
TOLUENE	<5		<5		<5		2.5	<5	<5		<5	94	
VC	5.7		<2		10		6.6	<2	3.4		3.1	11	

MW–12	4/02	7/05	3/07	MW–12R	7/07	11/07	1/08	4/08	8/08	8/08 (DUP)	10/08	2/09	8/09
VOCs	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/09	3/10	6/10		2/12	4/12	7/12	10/12	2/13	4/13	7/13	10/13	
VOCs	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	

MW–4	7/01	7/05	9/06	3/07	MW–4R	7/07	11/07	1/08	4/08	8/08	10/08	2/09	8/09	12/09
CIS–1,2–DCE	10	<5	14	<5.0		6.9	<5.0	<5	<5	DRY	<5	<5	<5	5.8
PCE	3	15	<5	5.9		6.9	8.4	<5	<5		<5	<5	<5	<5
TCE	<5	<5	<5	<5		<5	<5	<5	<5		<5	<5	<5	<5
VC	<2	<2	2	<2		<2	<2.0	<2	<2		<2	<2	<2	<2
	3/10	6/10	2/12	4/12		7/12	10/12	2/13	4/13	7/13	7/13 (DUP)	10/13	6/14	
CIS–1,2–DCE	9.8	9.8	8.0	<5		6.4	6.6	<5	<5	5.7	5.7	7.0	6.5	
PCE	<5	<5	<5	<5		<5	<5	<5	<5	<5	<5	<5	<5	
TCE	5.8	6.5	<5	<5		<5	<5	<5	<5	<5	<5	<5	<5	
VC	<2	<2	<2	<2		<2	<2	<2	<2	<2	<2	<2	<2	

SW–2	7/01	3/07	7/07	11/07	1/08	4/08	8/08	10/08	2/09	8/09	12/09
STYRENE	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
		3/10	6/10	2/12	4/12	7/12	7/12 (DUP)	10/12	2/13	4/13	7/13	10/13
STYRENE		5.6	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

MW–5	7/01	7/05	3/07	7/07	11/07	1/08	4/08	8/08	8/08 (DUP)	10/08	2/09	2/09 (DUP)	8/09
CIS–1,2–DCE	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	12/09	3/10	6/10	2/12	4/12	7/12	10/12	10/12 (DUP)	2/13	4/13	7/13	10/13	
CIS–1,2–DCE	<5	<5	<5	<5	<5	<5	7.0	5.9	<5	<5	<5	<5	



LEGEND:

- GROUNDWATER MONITORING WELL (ECA 6/00)
- GROUNDWATER MONITORING WELL (LAW/MACTEC 7/01, 3/02, 4/02, 8/09)
- GROUNDWATER MONITORING WELL (MACTEC/AMEC 3/06, 8/09, 2/12)
- REPLACEMENT MONITORING WELL (MACTEC 6/07)
- SURFACE WATER SAMPLE LOCATION FOR
- WELL USED FOR ANNUAL MONITORING

DCE DICHLORETHENE
TCE TRICHLOROETHENE
PCE TETRACHLOROETHENE
VC VINYL CHLORIDE

NOTE: RESULTS PRESENTED IN MICORGRAMS PER LITER (µg/l)

SCALE IN FEET
0 50 100

REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED
DRAWN TJB
CHECKED SF
IN CHARGE CTF
DATE OCT 2013

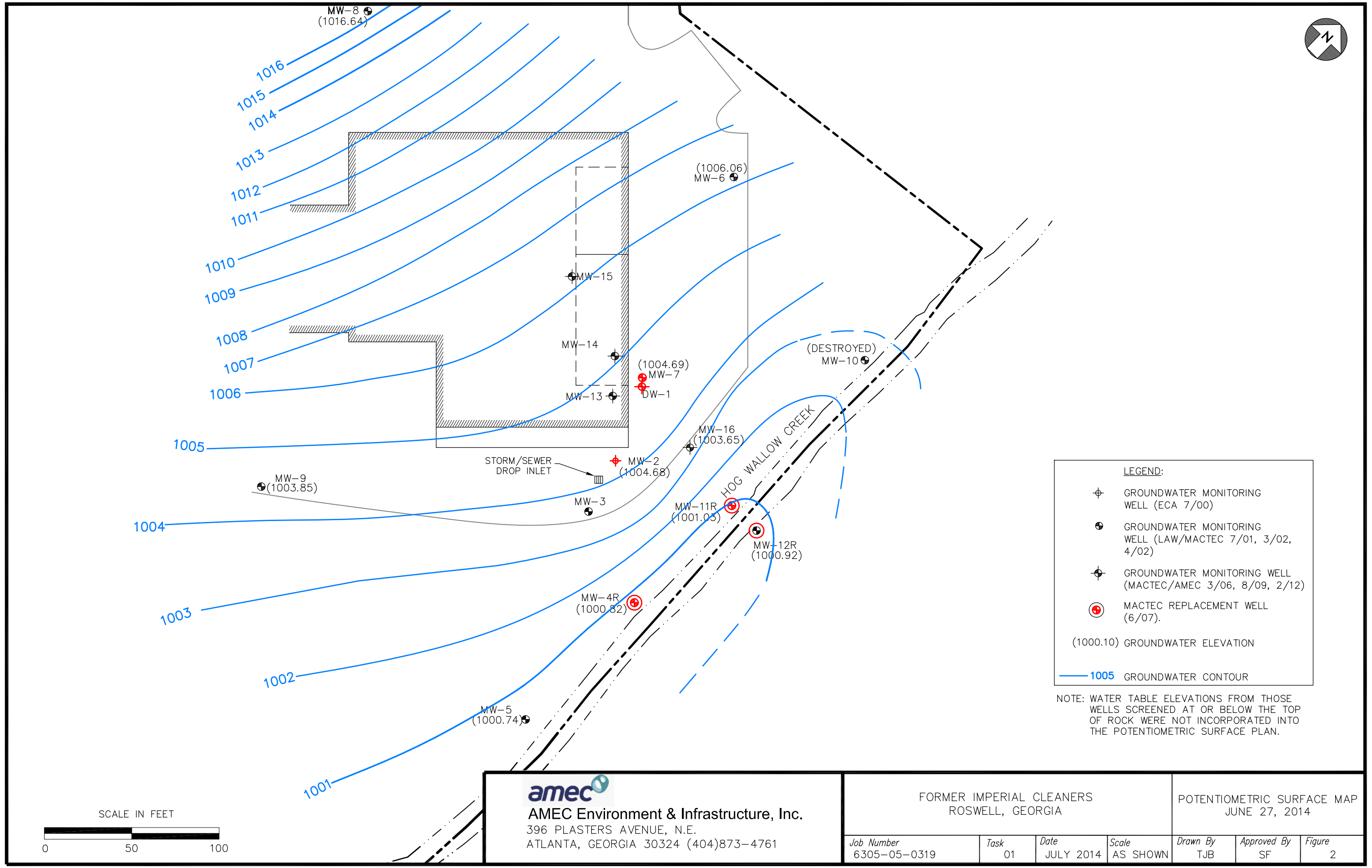
FORMER IMPERIAL CLEANERS
ROSWELL, GEORGIA

AMEC Environment & Infrastructure, Inc.
396 PLASTERS AVENUE, N.E.
ATLANTA, GEORGIA (404) 873–4761

CUMULATIVE GROUNDWATER TESTING RESULTS

SCALE AS SHOWN
CONTRACT 6305–05–0319
FIGURE NO. 1 REV PAGE NO

J:\Plasters Ave_PLASTERS CAD\Atlanta Projects\IMPERIAL CLEANERS\Potentiometric Surface – june 2014.dwg – pot 08/01/2014 10:06am Tonya.Gladstone



LEGEND:

- GROUNDWATER MONITORING WELL (ECA 7/00)
- GROUNDWATER MONITORING WELL (LAW/MACTEC 7/01, 3/02, 4/02)
- GROUNDWATER MONITORING WELL (MACTEC/AMEC 3/06, 8/09, 2/12)
- MACTEC REPLACEMENT WELL (6/07).
- (1000.10) GROUNDWATER ELEVATION
- 1005 GROUNDWATER CONTOUR

NOTE: WATER TABLE ELEVATIONS FROM THOSE WELLS SCREENED AT OR BELOW THE TOP OF ROCK WERE NOT INCORPORATED INTO THE POTENTIOMETRIC SURFACE PLAN.

amec
AMEC Environment & Infrastructure, Inc.
396 PLASTERS AVENUE, N.E.
ATLANTA, GEORGIA 30324 (404)873–4761

FORMER IMPERIAL CLEANERS
ROSWELL, GEORGIA

POTENTIOMETRIC SURFACE MAP
JUNE 27, 2014

Job Number	Task	Date	Scale	Drawn By	Approved By	Figure
6305–05–0319	01	JULY 2014	AS SHOWN	TJB	SF	2

APPENDIX A

LABORATORY DATA REPORTS

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

July 03, 2014

Steve Foley
AMEC E&I, Inc. - Plasters
2677 Buford Highway NE
Atlanta GA 30324

TEL: (404) 873-4761
FAX: (404) 817-0183

RE: Imperial Cleaners

Dear Steve Foley: Order No: 1406P54

Analytical Environmental Services, Inc. received 7 samples on 6/27/2014 3:00:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Tara Esbeck

Tara Esbeck
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1406154

Date: 6/27/14 Page 1 of 1

COMPANY: AMOC 541	ADDRESS: 2677 BUFORD HWY ATLANTA, GA 30324
PHONE: 404-817-0152	FAX:
SAMPLED BY: STEPHEN FOLEY	SIGNATURE:

ANALYSIS REQUESTED: 8260B

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes) HCl	REMARKS	No # of Containers
1	DW-1	6/27/14	0930	X		GW	X		2
2	MW-1		1035						2
3	MW-2		1130						2
4	MW-4R		1355						2
5	MW-11R		1430						2
6	DUP		-						2
7	TRIP BLANK					W			2
8									
9									
10									
11									
12									
13									
14									

RELINQUISHED	DATE/TIME	RECEIVED BY	DATE/TIME
1:	6/27/14 1500	1: Lataya R	6/27/14 3p
2:		2:	
3:		3:	

PROJECT INFORMATION

PROJECT NAME: IMPERIAL CLEANERS
PROJECT #: G305-05-0319
SITE ADDRESS: ROSWELL, GA
SEND REPORT TO: STEPHEN FOLEY
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 14

Turnaround Time Request
- (X) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush (auth req.)
- ( ) Other

STATE PROGRAM (if any):
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 3-Jul-14

Client: AMEC E&I, Inc. - Plasters
Project: Imperial Cleaners
Lab ID: 1406P54

Case Narrative

Volatile Organic Compounds Analysis by Method 8260B:

Toluene values for the QC samples 1406O78-005AMS/MSD are "E" qualified indicating estimated values over linear calibration range due to the level of target analyte present in the unspiked sample.

Analytical Environmental Services, Inc **Date:** 3-Jul-14

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	DW-1
Project Name:	Imperial Cleaners	**Collection Date:**	6/27/2014 9:30:00 AM
Lab ID:	1406P54-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
1,1,2-Trichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
1,1-Dichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
1,1-Dichloroethene	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
1,2-Dibromoethane	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
1,2-Dichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
1,2-Dichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
1,2-Dichloropropane	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
1,3-Dichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
1,4-Dichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
1,4-Dioxane	BRL	150		ug/L	193178	1	07/02/2014 01:54	GK
2-Butanone	BRL	50		ug/L	193178	1	07/02/2014 01:54	GK
2-Hexanone	BRL	10		ug/L	193178	1	07/02/2014 01:54	GK
4-Methyl-2-pentanone	BRL	10		ug/L	193178	1	07/02/2014 01:54	GK
Acetone	BRL	50		ug/L	193178	1	07/02/2014 01:54	GK
Benzene	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
Bromodichloromethane	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
Bromoform	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
Bromomethane	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
Carbon disulfide	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
Carbon tetrachloride	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
Chlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
Chloroethane	BRL	10		ug/L	193178	1	07/02/2014 01:54	GK
Chloroform	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
Chloromethane	BRL	10		ug/L	193178	1	07/02/2014 01:54	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
Cyclohexane	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
Dibromochloromethane	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
Dichlorodifluoromethane	BRL	10		ug/L	193178	1	07/02/2014 01:54	GK
Ethylbenzene	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
Freon-113	BRL	10		ug/L	193178	1	07/02/2014 01:54	GK
Isopropylbenzene	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
Methyl acetate	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
Methyl tert-butyl ether	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
Methylcyclohexane	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
Methylene chloride	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
Styrene	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 3-Jul-14

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	DW-1
Project Name:	Imperial Cleaners	**Collection Date:**	6/27/2014 9:30:00 AM
Lab ID:	1406P54-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Tetrachloroethene	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
Toluene	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
Trichloroethene	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
Trichlorofluoromethane	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
Vinyl chloride	BRL	2.0		ug/L	193178	1	07/02/2014 01:54	GK
Xylenes, Total	BRL	5.0		ug/L	193178	1	07/02/2014 01:54	GK
Surr: 4-Bromofluorobenzene	96.2	66.2-120		%REC	193178	1	07/02/2014 01:54	GK
Surr: Dibromofluoromethane	102	79.5-121		%REC	193178	1	07/02/2014 01:54	GK
Surr: Toluene-d8	96.3	77-117		%REC	193178	1	07/02/2014 01:54	GK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 3-Jul-14

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-7
Project Name:	Imperial Cleaners	**Collection Date:**	6/27/2014 10:35:00 AM
Lab ID:	1406P54-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
1,1,2-Trichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
1,1-Dichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
1,1-Dichloroethene	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
1,2-Dibromoethane	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
1,2-Dichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
1,2-Dichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
1,2-Dichloropropane	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
1,3-Dichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
1,4-Dichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
1,4-Dioxane	BRL	150		ug/L	193178	1	07/02/2014 02:21	GK
2-Butanone	BRL	50		ug/L	193178	1	07/02/2014 02:21	GK
2-Hexanone	BRL	10		ug/L	193178	1	07/02/2014 02:21	GK
4-Methyl-2-pentanone	BRL	10		ug/L	193178	1	07/02/2014 02:21	GK
Acetone	BRL	50		ug/L	193178	1	07/02/2014 02:21	GK
Benzene	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
Bromodichloromethane	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
Bromoform	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
Bromomethane	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
Carbon disulfide	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
Carbon tetrachloride	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
Chlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
Chloroethane	BRL	10		ug/L	193178	1	07/02/2014 02:21	GK
Chloroform	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
Chloromethane	BRL	10		ug/L	193178	1	07/02/2014 02:21	GK
cis-1,2-Dichloroethene	73	5.0		ug/L	193178	1	07/02/2014 02:21	GK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
Cyclohexane	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
Dibromochloromethane	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
Dichlorodifluoromethane	BRL	10		ug/L	193178	1	07/02/2014 02:21	GK
Ethylbenzene	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
Freon-113	BRL	10		ug/L	193178	1	07/02/2014 02:21	GK
Isopropylbenzene	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
Methyl acetate	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
Methyl tert-butyl ether	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
Methylcyclohexane	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
Methylene chloride	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
Styrene	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK

Qualifiers:

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- BRL Below reporting limit
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- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 3-Jul-14

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-7
Project Name:	Imperial Cleaners	**Collection Date:**	6/27/2014 10:35:00 AM
Lab ID:	1406P54-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Tetrachloroethene	1000	50		ug/L	193178	10	07/02/2014 17:55	GK
Toluene	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
trans-1,2-Dichloroethene	6.3	5.0		ug/L	193178	1	07/02/2014 02:21	GK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
Trichloroethene	190	5.0		ug/L	193178	1	07/02/2014 02:21	GK
Trichlorofluoromethane	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
Vinyl chloride	BRL	2.0		ug/L	193178	1	07/02/2014 02:21	GK
Xylenes, Total	BRL	5.0		ug/L	193178	1	07/02/2014 02:21	GK
Surr: 4-Bromofluorobenzene	93.6	66.2-120		%REC	193178	1	07/02/2014 02:21	GK
Surr: 4-Bromofluorobenzene	93	66.2-120		%REC	193178	10	07/02/2014 17:55	GK
Surr: Dibromofluoromethane	95.7	79.5-121		%REC	193178	10	07/02/2014 17:55	GK
Surr: Dibromofluoromethane	98.7	79.5-121		%REC	193178	1	07/02/2014 02:21	GK
Surr: Toluene-d8	99.5	77-117		%REC	193178	1	07/02/2014 02:21	GK
Surr: Toluene-d8	99.6	77-117		%REC	193178	10	07/02/2014 17:55	GK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 3-Jul-14

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-2
Project Name:	Imperial Cleaners	**Collection Date:**	6/27/2014 11:30:00 AM
Lab ID:	1406P54-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
1,1,2-Trichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
1,1-Dichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
1,1-Dichloroethene	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
1,2-Dibromoethane	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
1,2-Dichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
1,2-Dichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
1,2-Dichloropropane	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
1,3-Dichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
1,4-Dichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
1,4-Dioxane	BRL	150		ug/L	193178	1	07/02/2014 02:48	GK
2-Butanone	BRL	50		ug/L	193178	1	07/02/2014 02:48	GK
2-Hexanone	BRL	10		ug/L	193178	1	07/02/2014 02:48	GK
4-Methyl-2-pentanone	BRL	10		ug/L	193178	1	07/02/2014 02:48	GK
Acetone	BRL	50		ug/L	193178	1	07/02/2014 02:48	GK
Benzene	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
Bromodichloromethane	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
Bromoform	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
Bromomethane	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
Carbon disulfide	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
Carbon tetrachloride	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
Chlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
Chloroethane	BRL	10		ug/L	193178	1	07/02/2014 02:48	GK
Chloroform	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
Chloromethane	BRL	10		ug/L	193178	1	07/02/2014 02:48	GK
cis-1,2-Dichloroethene	490	50		ug/L	193178	10	07/02/2014 18:22	GK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
Cyclohexane	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
Dibromochloromethane	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
Dichlorodifluoromethane	BRL	10		ug/L	193178	1	07/02/2014 02:48	GK
Ethylbenzene	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
Freon-113	BRL	10		ug/L	193178	1	07/02/2014 02:48	GK
Isopropylbenzene	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
Methyl acetate	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
Methyl tert-butyl ether	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
Methylcyclohexane	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
Methylene chloride	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
Styrene	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 3-Jul-14

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-2
Project Name:	Imperial Cleaners	**Collection Date:**	6/27/2014 11:30:00 AM
Lab ID:	1406P54-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Tetrachloroethene	66	5.0		ug/L	193178	1	07/02/2014 02:48	GK
Toluene	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
trans-1,2-Dichloroethene	19	5.0		ug/L	193178	1	07/02/2014 02:48	GK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
Trichloroethene	39	5.0		ug/L	193178	1	07/02/2014 02:48	GK
Trichlorofluoromethane	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
Vinyl chloride	180	20		ug/L	193178	10	07/02/2014 18:22	GK
Xylenes, Total	BRL	5.0		ug/L	193178	1	07/02/2014 02:48	GK
Surr: 4-Bromofluorobenzene	89.4	66.2-120		%REC	193178	1	07/02/2014 02:48	GK
Surr: 4-Bromofluorobenzene	91.2	66.2-120		%REC	193178	10	07/02/2014 18:22	GK
Surr: Dibromofluoromethane	93.2	79.5-121		%REC	193178	10	07/02/2014 18:22	GK
Surr: Dibromofluoromethane	98.2	79.5-121		%REC	193178	1	07/02/2014 02:48	GK
Surr: Toluene-d8	99.1	77-117		%REC	193178	1	07/02/2014 02:48	GK
Surr: Toluene-d8	99.5	77-117		%REC	193178	10	07/02/2014 18:22	GK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 3-Jul-14

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-4R
Project Name:	Imperial Cleaners	**Collection Date:**	6/27/2014 1:55:00 PM
Lab ID:	1406P54-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
1,1,2-Trichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
1,1-Dichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
1,1-Dichloroethene	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
1,2-Dibromoethane	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
1,2-Dichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
1,2-Dichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
1,2-Dichloropropane	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
1,3-Dichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
1,4-Dichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
1,4-Dioxane	BRL	150		ug/L	193178	1	07/02/2014 03:15	GK
2-Butanone	BRL	50		ug/L	193178	1	07/02/2014 03:15	GK
2-Hexanone	BRL	10		ug/L	193178	1	07/02/2014 03:15	GK
4-Methyl-2-pentanone	BRL	10		ug/L	193178	1	07/02/2014 03:15	GK
Acetone	BRL	50		ug/L	193178	1	07/02/2014 03:15	GK
Benzene	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
Bromodichloromethane	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
Bromoform	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
Bromomethane	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
Carbon disulfide	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
Carbon tetrachloride	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
Chlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
Chloroethane	BRL	10		ug/L	193178	1	07/02/2014 03:15	GK
Chloroform	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
Chloromethane	BRL	10		ug/L	193178	1	07/02/2014 03:15	GK
cis-1,2-Dichloroethene	6.5	5.0		ug/L	193178	1	07/02/2014 03:15	GK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
Cyclohexane	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
Dibromochloromethane	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
Dichlorodifluoromethane	BRL	10		ug/L	193178	1	07/02/2014 03:15	GK
Ethylbenzene	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
Freon-113	BRL	10		ug/L	193178	1	07/02/2014 03:15	GK
Isopropylbenzene	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
Methyl acetate	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
Methyl tert-butyl ether	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
Methylcyclohexane	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
Methylene chloride	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
Styrene	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 3-Jul-14

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-4R
Project Name:	Imperial Cleaners	**Collection Date:**	6/27/2014 1:55:00 PM
Lab ID:	1406P54-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Tetrachloroethene	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
Toluene	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
Trichloroethene	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
Trichlorofluoromethane	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
Vinyl chloride	BRL	2.0		ug/L	193178	1	07/02/2014 03:15	GK
Xylenes, Total	BRL	5.0		ug/L	193178	1	07/02/2014 03:15	GK
Surr: 4-Bromofluorobenzene	89.1	66.2-120		%REC	193178	1	07/02/2014 03:15	GK
Surr: Dibromofluoromethane	97.8	79.5-121		%REC	193178	1	07/02/2014 03:15	GK
Surr: Toluene-d8	101	77-117		%REC	193178	1	07/02/2014 03:15	GK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 3-Jul-14

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-11R
Project Name:	Imperial Cleaners	**Collection Date:**	6/27/2014 2:30:00 PM
Lab ID:	1406P54-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
1,1,2-Trichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
1,1-Dichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
1,1-Dichloroethene	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
1,2-Dibromoethane	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
1,2-Dichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
1,2-Dichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
1,2-Dichloropropane	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
1,3-Dichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
1,4-Dichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
1,4-Dioxane	BRL	150		ug/L	193178	1	07/02/2014 06:55	GK
2-Butanone	BRL	50		ug/L	193178	1	07/02/2014 06:55	GK
2-Hexanone	BRL	10		ug/L	193178	1	07/02/2014 06:55	GK
4-Methyl-2-pentanone	BRL	10		ug/L	193178	1	07/02/2014 06:55	GK
Acetone	BRL	50		ug/L	193178	1	07/02/2014 06:55	GK
Benzene	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
Bromodichloromethane	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
Bromoform	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
Bromomethane	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
Carbon disulfide	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
Carbon tetrachloride	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
Chlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
Chloroethane	BRL	10		ug/L	193178	1	07/02/2014 06:55	GK
Chloroform	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
Chloromethane	BRL	10		ug/L	193178	1	07/02/2014 06:55	GK
cis-1,2-Dichloroethene	62	5.0		ug/L	193178	1	07/02/2014 06:55	GK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
Cyclohexane	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
Dibromochloromethane	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
Dichlorodifluoromethane	BRL	10		ug/L	193178	1	07/02/2014 06:55	GK
Ethylbenzene	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
Freon-113	BRL	10		ug/L	193178	1	07/02/2014 06:55	GK
Isopropylbenzene	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
Methyl acetate	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
Methyl tert-butyl ether	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
Methylcyclohexane	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
Methylene chloride	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
Styrene	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 3-Jul-14

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-11R
Project Name:	Imperial Cleaners	**Collection Date:**	6/27/2014 2:30:00 PM
Lab ID:	1406P54-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Tetrachloroethene	13	5.0		ug/L	193178	1	07/02/2014 06:55	GK
Toluene	94	5.0		ug/L	193178	1	07/02/2014 06:55	GK
trans-1,2-Dichloroethene	5.3	5.0		ug/L	193178	1	07/02/2014 06:55	GK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
Trichloroethene	17	5.0		ug/L	193178	1	07/02/2014 06:55	GK
Trichlorofluoromethane	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
Vinyl chloride	11	2.0		ug/L	193178	1	07/02/2014 06:55	GK
Xylenes, Total	BRL	5.0		ug/L	193178	1	07/02/2014 06:55	GK
Surr: 4-Bromofluorobenzene	88.3	66.2-120		%REC	193178	1	07/02/2014 06:55	GK
Surr: Dibromofluoromethane	97.9	79.5-121		%REC	193178	1	07/02/2014 06:55	GK
Surr: Toluene-d8	102	77-117		%REC	193178	1	07/02/2014 06:55	GK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 3-Jul-14

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	DUP
Project Name:	Imperial Cleaners	**Collection Date:**	6/27/2014
Lab ID:	1406P54-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
1,1,2-Trichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
1,1-Dichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
1,1-Dichloroethene	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
1,2-Dibromoethane	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
1,2-Dichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
1,2-Dichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
1,2-Dichloropropane	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
1,3-Dichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
1,4-Dichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
1,4-Dioxane	BRL	150		ug/L	193178	1	07/02/2014 03:43	GK
2-Butanone	BRL	50		ug/L	193178	1	07/02/2014 03:43	GK
2-Hexanone	BRL	10		ug/L	193178	1	07/02/2014 03:43	GK
4-Methyl-2-pentanone	BRL	10		ug/L	193178	1	07/02/2014 03:43	GK
Acetone	BRL	50		ug/L	193178	1	07/02/2014 03:43	GK
Benzene	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
Bromodichloromethane	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
Bromoform	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
Bromomethane	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
Carbon disulfide	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
Carbon tetrachloride	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
Chlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
Chloroethane	BRL	10		ug/L	193178	1	07/02/2014 03:43	GK
Chloroform	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
Chloromethane	BRL	10		ug/L	193178	1	07/02/2014 03:43	GK
cis-1,2-Dichloroethene	490	50		ug/L	193178	10	07/02/2014 18:50	GK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
Cyclohexane	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
Dibromochloromethane	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
Dichlorodifluoromethane	BRL	10		ug/L	193178	1	07/02/2014 03:43	GK
Ethylbenzene	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
Freon-113	BRL	10		ug/L	193178	1	07/02/2014 03:43	GK
Isopropylbenzene	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
Methyl acetate	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
Methyl tert-butyl ether	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
Methylcyclohexane	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
Methylene chloride	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
Styrene	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 3-Jul-14

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	DUP
Project Name:	Imperial Cleaners	**Collection Date:**	6/27/2014
Lab ID:	1406P54-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Tetrachloroethene	62	5.0		ug/L	193178	1	07/02/2014 03:43	GK
Toluene	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
trans-1,2-Dichloroethene	18	5.0		ug/L	193178	1	07/02/2014 03:43	GK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
Trichloroethene	39	5.0		ug/L	193178	1	07/02/2014 03:43	GK
Trichlorofluoromethane	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
Vinyl chloride	190	20		ug/L	193178	10	07/02/2014 18:50	GK
Xylenes, Total	BRL	5.0		ug/L	193178	1	07/02/2014 03:43	GK
Surr: 4-Bromofluorobenzene	88.6	66.2-120		%REC	193178	1	07/02/2014 03:43	GK
Surr: 4-Bromofluorobenzene	90.5	66.2-120		%REC	193178	10	07/02/2014 18:50	GK
Surr: Dibromofluoromethane	95	79.5-121		%REC	193178	10	07/02/2014 18:50	GK
Surr: Dibromofluoromethane	98.2	79.5-121		%REC	193178	1	07/02/2014 03:43	GK
Surr: Toluene-d8	99	77-117		%REC	193178	10	07/02/2014 18:50	GK
Surr: Toluene-d8	100	77-117		%REC	193178	1	07/02/2014 03:43	GK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 3-Jul-14

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	TRIP BLANK
Project Name:	Imperial Cleaners	**Collection Date:**	6/27/2014
Lab ID:	1406P54-007	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
1,1,2-Trichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
1,1-Dichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
1,1-Dichloroethene	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
1,2-Dibromoethane	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
1,2-Dichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
1,2-Dichloroethane	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
1,2-Dichloropropane	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
1,3-Dichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
1,4-Dichlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
1,4-Dioxane	BRL	150		ug/L	193178	1	07/02/2014 01:26	GK
2-Butanone	BRL	50		ug/L	193178	1	07/02/2014 01:26	GK
2-Hexanone	BRL	10		ug/L	193178	1	07/02/2014 01:26	GK
4-Methyl-2-pentanone	BRL	10		ug/L	193178	1	07/02/2014 01:26	GK
Acetone	BRL	50		ug/L	193178	1	07/02/2014 01:26	GK
Benzene	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
Bromodichloromethane	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
Bromoform	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
Bromomethane	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
Carbon disulfide	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
Carbon tetrachloride	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
Chlorobenzene	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
Chloroethane	BRL	10		ug/L	193178	1	07/02/2014 01:26	GK
Chloroform	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
Chloromethane	BRL	10		ug/L	193178	1	07/02/2014 01:26	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
Cyclohexane	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
Dibromochloromethane	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
Dichlorodifluoromethane	BRL	10		ug/L	193178	1	07/02/2014 01:26	GK
Ethylbenzene	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
Freon-113	BRL	10		ug/L	193178	1	07/02/2014 01:26	GK
Isopropylbenzene	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
Methyl acetate	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
Methyl tert-butyl ether	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
Methylcyclohexane	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
Methylene chloride	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
Styrene	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 3-Jul-14

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	TRIP BLANK
Project Name:	Imperial Cleaners	**Collection Date:**	6/27/2014
Lab ID:	1406P54-007	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Tetrachloroethene	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
Toluene	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
Trichloroethene	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
Trichlorofluoromethane	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
Vinyl chloride	BRL	2.0		ug/L	193178	1	07/02/2014 01:26	GK
Xylenes, Total	BRL	5.0		ug/L	193178	1	07/02/2014 01:26	GK
Surr: 4-Bromofluorobenzene	92.3	66.2-120		%REC	193178	1	07/02/2014 01:26	GK
Surr: Dibromofluoromethane	99.7	79.5-121		%REC	193178	1	07/02/2014 01:26	GK
Surr: Toluene-d8	98.6	77-117		%REC	193178	1	07/02/2014 01:26	GK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client AMEC Work Order Number 1406P54

Checklist completed by [signature] 6/27/14 - 6/28/14
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (4°C±2)* Yes ✓ No __

Cooler #1 3.1 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Client: AMEC E&I, Inc. - Plasters
Project Name: Imperial Cleaners
Workorder: 1406P54

ANALYTICAL QC SUMMARY REPORT

BatchID: 193178

Sample ID: **MB-193178** Client ID: Units: **ug/L** Prep Date: **07/01/2014** Run No: **270979**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **193178** Analysis Date: **07/01/2014** Seq No: **5718478**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
1,4-Dioxane	BRL	150									
2-Butanone	BRL	50									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	50									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	5.0									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. - Plasters
Project Name: Imperial Cleaners
Workorder: 1406P54

ANALYTICAL QC SUMMARY REPORT

BatchID: 193178

Sample ID: **MB-193178** Client ID: Units: **ug/L** Prep Date: **07/01/2014** Run No: **270979**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **193178** Analysis Date: **07/01/2014** Seq No: **5718478**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloromethane	BRL	10									
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	2.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	44.48	0	50.00		89.0	66.2	120				
Surr: Dibromofluoromethane	48.28	0	50.00		96.6	79.5	121				
Surr: Toluene-d8	49.51	0	50.00		99.0	77	117				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. - Plasters
Project Name: Imperial Cleaners
Workorder: 1406P54

ANALYTICAL QC SUMMARY REPORT

BatchID: 193178

Sample ID: **LCS-193178** Client ID: Units: **ug/L** Prep Date: **07/01/2014** Run No: **270979**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **193178** Analysis Date: **07/01/2014** Seq No: **5718479**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	45.53	5.0	50.00		91.1	63.1	140				
Benzene	46.32	5.0	50.00		92.6	74.2	129				
Chlorobenzene	45.41	5.0	50.00		90.8	70	129				
Toluene	46.83	5.0	50.00		93.7	74.2	129				
Trichloroethene	45.71	5.0	50.00		91.4	71.2	135				
Surr: 4-Bromofluorobenzene	46.06	0	50.00		92.1	66.2	120				
Surr: Dibromofluoromethane	50.36	0	50.00		101	79.5	121				
Surr: Toluene-d8	48.66	0	50.00		97.3	77	117				

Sample ID: **1406O78-005AMS** Client ID: Units: **ug/L** Prep Date: **07/01/2014** Run No: **270979**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **193178** Analysis Date: **07/02/2014** Seq No: **5718481**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	2312	250	2500		92.5	60.2	159				
Benzene	6064	250	2500	3587	99.1	70.2	138				
Chlorobenzene	2203	250	2500		88.1	70.1	133				
Toluene	26710	250	2500	23840	115	70	139				E
Trichloroethene	2360	250	2500		94.4	70.1	144				
Surr: 4-Bromofluorobenzene	2486	0	2500		99.4	66.2	120				
Surr: Dibromofluoromethane	2496	0	2500		99.8	79.5	121				
Surr: Toluene-d8	2530	0	2500		101	77	117				

Sample ID: **1406O78-005AMSD** Client ID: Units: **ug/L** Prep Date: **07/01/2014** Run No: **270979**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **193178** Analysis Date: **07/02/2014** Seq No: **5718482**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	2151	250	2500		86.0	60.2	159	2312	7.24	19.2	
Benzene	5820	250	2500	3587	89.3	70.2	138	6064	4.11	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. - Plasters
Project Name: Imperial Cleaners
Workorder: 1406P54

ANALYTICAL QC SUMMARY REPORT

BatchID: 193178

Sample ID: **1406O78-005AMSD** Client ID:
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B**
Units: **ug/L** Prep Date: **07/01/2014** Run No: **270979**
BatchID: **193178** Analysis Date: **07/02/2014** Seq No: **5718482**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlorobenzene	2184	250	2500		87.3	70.1	133	2203	0.889	20	
Toluene	26290	250	2500	23840	98.0	70	139	26710	1.60	20	E
Trichloroethene	2246	250	2500		89.8	70.1	144	2360	4.99	20	
Surr: 4-Bromofluorobenzene	2472	0	2500		98.9	66.2	120	2486	0	0	
Surr: Dibromofluoromethane	2403	0	2500		96.1	79.5	121	2496	0	0	
Surr: Toluene-d8	2492	0	2500		99.7	77	117	2530	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

APPENDIX B

FIELD DATA SHEETS

Former Imperial Cleaners
Roswell, Georgia

AMEC Project No. 6305050319

WELL PURGING - FIELD WATER QUALITY MEASUREMENTS FORM

Location: Imperial Cleaners

Identify Measuring Point (MP): _____TOC_____
(e.g. Top of Casing)

Well ID: MW-2

Field Sampling Personnel: S. Foley

Depth to Screen below MP: 16.3 of screen (Top) 26.3 of screen (Bottom)

Pump Intake at (ft. below MP): 24

Purging Device (Pump Type): _____
(e.g. Dedicated pump, peristaltic pump, bailer, bladder pump, etc.)

Water Column = 4.18
Casing Volume = 0.68
~~One~~ 3 well volume = 2.04

Date	Time 24 hr	Depth to Water Below MP ft	Purge Rate mL/min	pH pH units	Spec Cond. mS/cm	Turbidity NTUs	DO Flow cell mg/L	Temp. °C	Redox Potential mV	Cum. Volume Purged gallons	CHEMetrics DO mg/L (low)	Hach Ferrous Iron mg/L	Comments
6/27/14	1050	22.12		5.27	0.362	83.2	3.23	22.78	-105	0			
	1055	22.28		5.45	0.369	87.8	2.95	21.96	-109				
	1100	22.42		5.52	0.370	20.2	2.98	21.30	-112				
	1105	22.46		5.46	0.376	7.1	2.82	21.26	-100				
	1110	22.52		5.47	0.332	6.6	2.62	21.19	-86				
	1115	22.55		5.52	0.289	4.9	2.43	21.02	-81				
	1120	22.58		5.51	0.283	4.5	2.41	20.87	-81				
	1125	22.62		5.50	0.280	5.1	2.40	20.94	-80				
	1130	22.64		5.50	0.279	4.6	2.38	21.05	-80	2.5			SAMPLED @ 1130

Notes:
Note when "Stabilization " has occurred. Stabilization Criteria (achieved after a minimum of three successive readings):

±0.1 for pH
±10 mV for redox
±3% for specific cond.
±10% for DO
<20 NTUs for turbidity
NA for temperature

If stabilization does not occur within 2 hours, contact Site Manager for action.
If well goes dry prior to stabilization, stop, allow well to recharge, and collect sample.

Former Imperial Cleaners
Roswell, Georgia

AMEC Project No. 6305050319

WELL PURGING - FIELD WATER QUALITY MEASUREMENTS FORM

Location: Imperial Cleaners

Identify Measuring Point (MP): TOC
(e.g. Top of Casing)

Well ID: MW-4R

Field Sampling Personnel: S. Foley

Depth to Screen below MP: 7 (Top) of screen 10 (Bottom) of screen

Pump Intake at (ft. below MP): 10

Purging Device (Pump Type):
(e.g. Dedicated pump, peristaltic pump, bailer, bladder pump, etc.)

Water Column = [redacted]1.1
Casing Volume = 0.18
~~One~~ 3 well volume = 0.54

Date	Time 24 hr	Depth to Water Below MP ft	Purge Rate mL/min	pH pH units	Spec Cond. mS/cm	Turbidity NTUs	DO Flow cell mg/L	Temp. °C	Redox Potential mV	Cum. Volume Purged gallons	CHEMetrics DO mg/L (low)	Hach Ferrous Iron mg/L	Comments
6/8/09	1315	8.90	100	5.35	0.100	4.1	3.59	23.83	42	0			
	1320	9.11		5.06	0.102	0.8	3.36	22.69	46				
	1325	9.33		4.98	0.100	0.2	3.37	20.72	52				
	1330	9.51		4.87	0.101	0.3	3.29	20.64	56				
	1340	9.70		4.80	0.099	0.0	3.24	20.69	58				
	1345	9.92		4.78	0.099	0.2	3.21	20.51	59				well dry @ 1342
	1350	[redacted]											
													sampled @ 1355

Notes:
Note when "Stabilization " has occurred. Stabilization Criteria (achieved after a minimum of three successive readings):

±0.1 for pH
±10 mV for redox
±3% for specific cond.
±10% for DO
<20 NTUs for turbidity
NA for temperature

If stabilization does not occur within 2 hours, contact Site Manager for action.
If well goes dry prior to stabilization, stop, allow well to recharge, and collect sample.

Former Imperial Cleaners
Roswell, Georgia

AMEC Project No. 6305050319

WELL PURGING - FIELD WATER QUALITY MEASUREMENTS FORM

Location: Imperial Cleaners

Identify Measuring Point (MP): _____TOC_____
(e.g. Top of Casing)

Well ID: MW-7
Field Sampling Personnel: S. Foley

Depth to Screen below MP: 22.9 of screen (Top) 32.9 of screen (Bottom)

Pump Intake at (ft. below MP): 26 to 29
Purging Device (Pump Type): _____
(e.g. Dedicated pump, peristaltic pump, bailer, bladder pump, etc.)

Water Column = 8.0
Casing Volume = 1.3
One well volume = 3.9
3

Date	Time 24 hr	Depth to Water Below MP ft	Purge Rate mL/min	pH pH units	Spec Cond. mS/cm	Turbidity NTUs	DO Flow cell mg/L	Temp. °C	Redox Potential mV	Cum. Volume Purged gallons	CHEMetrics DO mg/L (low)	Hach Ferrous Iron mg/L	Comments
6/23/14	0950	24.90	~600	4.75	0.207	14.3	3.30	24.03	201	0			
	0955	25.31		4.42	0.213	13.4	3.18	22.55	227	.5			
	1000	25.60		4.40	0.214	12.6	3.14	22.20	245	1			
	1005	25.94		4.43	0.216	9.1	3.06	22.05	257	1.5			
	1010	26.20		4.51	0.219	9.3	2.31	22.11	272	2			
	1015	26.61		4.60	0.220	7.1	1.94	22.01	280	2.5			
	1020	26.85		4.62	0.220	8.6	2.02	21.93	291	3			
	1025	27.28		4.62	0.221	6.7	1.32	21.84	297	3.5			
	1030	27.49		4.63	0.221	7.1	1.16	21.81	299	4			
	1035	27.71		4.63	0.220	5.8	1.09	21.89	302	4.5			
													SAMPLED AT 1035

Notes:
Note when "Stabilization " has occurred. Stabilization Criteria (achieved after a minimum of three successive readings):

±0.1 for pH
±10 mV for redox
±3% for specific cond.
±10% for DO
<20 NTUs for turbidity
NA for temperature

If stabilization does not occur within 2 hours, contact Site Manager for action.
If well goes dry prior to stabilization, stop, allow well to recharge, and collect sample.

Former Imperial Cleaners
Roswell, Georgia

AMEC Project No. 6305050319

WELL PURGING - FIELD WATER QUALITY MEASUREMENTS FORM

Location: Imperial Cleaners

Identify Measuring Point (MP): TOC
(e.g. Top of Casing)

Well ID: MW-11R

Field Sampling Personnel: S. Foley

Depth to Screen below MP: 3.8 of screen (Top) 5.8 of screen (Bottom)

Pump Intake at (ft. below MP): 5.5

Purging Device (Pump Type): _____
(e.g. Dedicated pump, peristaltic pump, bailer, bladder pump, etc.)

Water Column = 0.71
Casing Volume = 0.12
One well volume = 0.36
3

Date	Time 24 hr	Depth to Water Below MP ft	Purge Rate mL/min	pH pH units	Spec Cond. mS/cm	Turbidity NTUs	DO Flow cell mg/L	Temp. °C	Redox Potential mV	Cum. Volume Purged gallons	CHEMetrics DO mg/L (low)	Hach Ferrous Iron mg/L	Comments
6/27/12	1415	5.09	~100	6.79	0.441	28.8	4.11	22.77	24	0			
	1420	5.54		6.67	0.401	17.2	2.08	21.88	31	0.1			
	1425	5.78		6.62	0.392	13.5	1.74	21.74	36	0.2			well dry
													Samples @ 1430

Notes:
Note when "Stabilization " has occurred. Stabilization Criteria (achieved after a minimum of three successive readings):

±0.1 for pH
±10 mV for redox
±3% for specific cond.
±10% for DO
<20 NTUs for turbidity
NA for temperature

If stabilization does not occur within 2 hours, contact Site Manager for action.
If well goes dry prior to stabilization, stop, allow well to recharge, and collect sample.

WELL PURGING - FIELD WATER QUALITY MEASUREMENTS FORM

Location: Imperial Cleaners

Identify Measuring Point (MP): _____TOC_____
(e.g. Top of Casing)

Well ID: DW-1
Field Sampling Personnel: S. Foley

Depth to Screen below MP: 50.5 (Top) of screen 55.5 (Bottom) of screen

Pump Intake at (ft. below MP): 30
Purging Device (Pump Type): _____
(e.g. Dedicated pump, peristaltic pump, bailer, bladder pump, etc.)

Water Column = 31.03
Casing Volume = 5.06
~~One~~ 3 well volume = 15.18

Date	Time 24 hr	Depth to Water Below MP ft	Purge Rate mL/min	pH pH units	Spec Cond. mS/cm	Turbidity NTUs	DO Flow cell mg/L	Temp. °C	Redox Potential mV	Cum. Volume Purged gallons	CHEMetrics DO mg/L (low)	Hach Ferrous Iron mg/L	Comments
6/27/14	0745	24.47	≈500	5.83	0.173	1.1	10.78	23.11	88	2			
	0800	25.01		5.49	0.175	0.7	4.88	22.35	116	4			
	0815	25.52		5.30	0.179	0.4	4.29	22.01	129	6			
	0830	25.89		5.25	0.159	0.5	2.98	21.84	152	8			
	0845	26.40		5.23	0.148	0.4	2.12	21.76	160	10			
	0900	26.65		5.21	0.145	0.8	1.87	21.81	171	12			
	0915	26.91		5.21	0.144	0.9	1.70	21.75	175	14			
	0930	27.13		5.20	0.144	1.0	1.62	21.72	180	16			SAMPLED AT 0930

Notes:
Note when "Stabilization " has occurred. Stabilization Criteria (achieved after a minimum of three successive readings):

±0.1 for pH
±10 mV for redox
±3% for specific cond.
±10% for DO
<20 NTUs for turbidity
NA for temperature

If stabilization does not occur within 2 hours, contact Site Manager for action.
If well goes dry prior to stabilization, stop, allow well to recharge, and collect sample.

ADDENDUM

REVISED TABLE 8, APPENDIX B OF AMEC'S MAY 8, 2012 RESPONSE TO COMMENTS

TABLE 8 – SUMMARY OF SOIL AND GROUNDWATER RISK REDUCTION STANDARDS

SOIL						
Regulated Substance	Highest Concentration, µg/kg	Location	Type 1 RRS Criteria, µg/kg (Residential Default)	Type 2 RRS Criteria, µg/kg (Residential Calculated)	Type 3 RRS Criteria, µg/kg (Non-Residential Default)	Type 4 RRS Criteria, µg/kg (Non-Residential Calculated)
Tetrachloroethene	1,200*	SB-6	500	170	500	1,200
Trichloroethene	7.8	SB-11	500	36	500	37
Acetone	150	HA-3	400,000	33,000	400,000	190,000
Toluene	13	HA-3	100,000	14,000	100,000	72,000
Cis-1,2-Dichloroethene	<5	NA	7,000	410	7,000	1,200
Trans-1,2-Dichloroethene	<5	NA	10,000	590	10,000	940
Vinyl Chloride	<5	NA	200	14	200	22
GROUNDWATER						
Regulated Substance	Highest Concentration, µg/l 3/30/10	Location	Type 1 RRS Criteria, µg/l (Residential Default)	Type 2 RRS Criteria, µg/l (Residential Calculated)	Type 3 RRS Criteria, µg/l (Non-Residential Default)	Type 4 RRS Criteria, µg/kg (Non-Residential Calculated)
Tetrachloroethene	4,800	MW-7	5	19	5	98
Trichloroethene	830	MW-2	5	1	5	5.2
Cis-1,2-Dichloroethene	280	MW-2	70	31	70	200
Trans-1,2-Dichloroethene	83	MW-2	100	32	100	160
Vinyl Chloride	100	MW-2	2	1.1	2	3.3

µg/kg - micrograms per kilogram (equivalent to parts per billion)
µg/L - micrograms per liter (equivalent to parts per billion)
NA - Not applicable as compounds have not been detected on site
* - A higher concentration was detected during an early assessment but could not be duplicated by subsequent intense sampling.
Note - Shaded values indicate compliance with RRS