UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1
5 Post Office Square, Suite 100
BOSTON, MA 02109-3912

CERTIFIED MAIL RETURN RECEIPT REQUESTED

JUN 27 2014

Matthew Lyons
Superintendent
Consigli Construction Company
72 Sumner Street
Milford, MA 01757

Re: Authorization to discharge under the Remediation General Permit (RGP) – MAG910000. City Square Development Project. Parcel F (3 Eaton Place) & Building E area site (formerly known as 200 Front Street) in Worcester, MA 01608, Worcester County; Authorization # MAG910626

Dear Mr. Lyons:

Based on the review of a Notice of Intent (NOI) submitted by Charles Klingler, from Environmental Compliance Services, Inc. on behalf of City Square II Development Co. LLC (CSD), for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Operator to discharge in accordance with the provisions of the RGP at that site. Your authorization number is listed above.

The checklist enclosed with this RGP authorization indicates the pollutants which you are required to monitor. Also indicated on the checklist are the effluent limits, test methods and minimum levels (MLs) for each pollutant. Please note that the checklist does not represent the complete requirements of the RGP. Operators must comply with all of the applicable requirements of this permit, including influent and effluent monitoring, narrative water quality standards, record keeping, and reporting requirements, found in Parts I and II, and Appendices I – VIII of the RGP. See EPA's website for the complete RGP and other information at: http://www.epa.gov/region1/npdes/mass.html#dgp.

Please note the enclosed checklist includes parameters which you marked "Believed Present". The checklist also includes other parameters for which your laboratory reports indicated there was insufficient sensitivity to detect these parameters at the minimum levels established in Appendix VI of the RGP.

Also, please note that the metals included on the checklist are dilution dependent pollutants and subject to limitations based on selected dilution ranges and technology-based ceiling limitations. For each parameter the dilution factor 27.09 for this site is within a dilution range greater than ten to fifty (>10 to 50), established in the RGP. (See

the RGP Appendix IV for Massachusetts facilities). Therefore, the limits for arsenic of 100 ug/L, trivalent chromium of 489 ug/L, hexavalent chromium of 114 ug/L, copper of 52 ug/L, lead of 13 ug/L, nickel of 290 ug/L, selenium of 50 ug/L, silver of 12 ug/L, zinc of 666 ug/L and iron of 5,000 ug/L, are required to achieve permit compliance at your site.

Finally, please note the checklist of pollutants attached to this authorization is subject to a recertification if the operations at the site result in a discharge lasting longer than six months. A recertification can be submitted to EPA within six (6) to twelve (12) months of operations in accordance with the 2010 RGP regulations.

This general permit and authorization to discharge will expire on September 9, 2015. You have reported that this project will terminate on December 30, 2014. You are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within 30 days of project completion.

Thank you in advance for your cooperation in this matter. Please contact Victor Alvarez at 617-918-1572 or Alvarez.Victor@epa.gov, if you have any questions.

Sincerely,

Thelma Murphy

Thelma Murphy, Chief
Storm Water and Construction
Permits Section

Enclosure

cc: Robert Kubit, MassDEP
Paul J. Moosey, Worcester PWD
Charles Klingler, ECS, Inc.

2010 Remediation General Permit
Summary of Monitoring Parameters[1]

NPDES Authorization Number:	**MAG910625**
Authorization Issued:	June, 2014
Facility/Site Name:	City Square Development
Facility/Site Address:	3 Eaton Place, Worcester, MA 01608
	Email address of owner:donald.birch@lmp.com
Legal Name of Operator:	Consigli Construction Company
Operator contact name, title, and Address:	Matthew Lyons, Superintendent, 72 Sumner Street, Milford, MA 01757: Phone 508 473-3588
	Email:mlyons@consigli.com
Estimated date of The Project Completion:	December 30, 2014
Category and Sub-Category:	Category. Subcategory
RGP Termination Date:	September 2015
Receiving Water:	Blackstone River

Monitoring & Limits are applicable if checked. All samples are to be collected as grab samples

	Parameter	**Effluent Limit/Method#/ML** (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
√	1. Total Suspended Solids (TSS)	30 milligrams/liter (mg/L) **, 50 mg/L for hydrostatic testing ** Me#160.2/ML5ug/L
√	2. Total Residual Chlorine (TRC) [1]	Freshwater = 11 ug/L ** Saltwater = 7.5 ug/L **/ Me#330.5/ML 20ug/L
√	3. Total Petroleum Hydrocarbons (TPH)	5.0 mg/L/ Me# 1664A/ML 5.0mg/L
	4. Cyanide (CN) [2, 3]	Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/L **/ Me#335.4/ML 10ug/L
	5. Benzene (B)	5ug/L /50.0 ug/L for hydrostatic testing only/ Me#8260C/ML 2 ug/L
	6. Toluene (T)	(limited as ug/L total BTEX)/ Me#8260C/ ML 2ug/L
	7. Ethylbenzene (E)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
	8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) [4]	100 ug/L/ Me#8260C/ ML 2ug/L
	10. Ethylene Dibromide (EDB) (1,2- Dibromoethane)	0.05 ug/l/ Me#8260C/ ML 10ug/L
	11. Methyl-tert-Butyl Ether (MtBE)	70.0 ug/l/Me#8260C/ML 10ug/L
	12.tert-Butyl Alcohol (TBA) (TertiaryButanol)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
	13. tert-Amyl Methyl Ether (TAME)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
	14. Naphthalene [5]	20 ug/L /Me#8260C/ML 2ug/L
	15. Carbon Tetrachloride	4.4 ug/L /Me#8260C/ ML 5ug/L
	16. 1,2 Dichlorobenzene (o-DCB)	600 ug/L /Me#8260C/ ML 5ug/L
	17. 1,3 Dichlorobenzene (m-DCB)	320 ug/L /Me#8260C/ ML 5ug/L
	18. 1,4 Dichlorobenzene (p-DCB)	5.0 ug/L /Me#8260C/ ML 5ug/L
	18a. Total dichlorobenzene	763 ug/L - NH only /Me#8260C/ ML 5ug/L
	19. 1,1 Dichloroethane (DCA)	70 ug/L /Me#8260C/ ML 5ug/L
	20. 1,2 Dichloroethane (DCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
	21. 1,1 Dichloroethene (DCE)	3.2 ug/L/Me#8260C/ ML 5ug/L
	22. cis-1,2 Dichloroethene (DCE)	70 ug/L/Me#8260C/ ML 5ug/L
	23. Methylene Chloride	4.6 ug/L/Me#8260C/ ML 5ug/L
	24. Tetrachloroethene (PCE)	5.0 ug/L/Me#8260C/ ML 5ug/L
	25. 1,1,1 Trichloro-ethane (TCA)	200 ug/L/Me#8260C/ ML 5ug/L
	26. 1,1,2 Trichloro-ethane (TCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
	27. Trichloroethene (TCE)	5.0 ug/L /Me#8260C/ ML 5ug/L
	28. Vinyl Chloride (Chloroethene)	2.0 ug/L /Me#8260C/ ML 5ug/L
	29. Acetone	Monitor Only(ug/L)/Me#8260C/ML 50ug/L
	30. 1,4 Dioxane	Monitor Only /Me#1624C/ML 50ug/L
	31. Total Phenols	300 ug/L Me#420.1&420.2/ML 2 ug/L/ Me# 420.4 /ML 50ug/L
	32. Pentachlorophenol (PCP)	1.0 ug/L /Me#8270D/ML 5ug/L,Me#604 &625/ML 10ug/L
	33. Total Phthalates (Phthalate esters) [6]	3.0 ug/L ** /Me#8270D/ML 5ug/L, Me#606/ML 10ug/L& Me#625/ML 5ug/L
√	34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	6.0 ug/L /Me#8270D/ML 5ug/L,Me#606/ML 10ug/L & Me#625/ML 5ug/L

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/L
√	a. Benzo(a) Anthracene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	b. Benzo(a) Pyrene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	c. Benzo(b)Fluoranthene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	d. Benzo(k)Fluoranthene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	e. Chrysene [7]	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	f. Dibenzo(a,h)anthracene [7]	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	g. Indeno(1,2,3-cd) Pyrene [7]	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML5ug/L
	36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/L
√	h. Acenaphthene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	i. Acenaphthylene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	j. Anthracene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	k. Benzo(ghi) Perylene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	l. Fluoranthene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	m. Fluorene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	n. Naphthalene [5]	20 ug/l / Me#8270/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	o. Phenanthrene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	p. Pyrene	X/Me#8270D/ML5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	37. Total Polychlorinated Biphenyls (PCBs) [8, 9]	0.000064 ug/L/Me# 608/ ML 0.5 ug/L
√	38. Chloride	Monitor only/Me# 300.0/ ML 100 ug/L

	Metal parameter	Total Recoverable Metal Limit @ H [10]= 50 mg/l CaCO3 for discharges in Massachusetts (ug/l) [11/12] Freshwater		Minimum level=ML	
	39. Antimony	5.6/ML 10		ML 10	
√	40. Arsenic **	100		ML	20
	41. Cadmium **	0.2		ML	10
√	42. Chromium III (trivalent) **	277		ML	15
√	43. Chromium VI (hexavalent) **	114		ML	10
√	44. Copper **	29		ML	15
√	45. Lead **	5		ML	20
	46. Mercury **	0.9		ML	0.2
√	47. Nickel **	161		ML	20
√	48. Selenium **	50		ML	20
√	49. Silver	4		ML	10
√	50. Zinc **	370		ML	15
√	51. Iron	5,000		ML	20

	Other Parameters	Limit
√	52. Instantaneous Flow	Site specific in CFS
√	53. Total Flow	Site specific in CFS
√	54. pH Range for Class A & Class B Waters in MA	6.5-8.3; 1/Month/Grab[13]
	55. pH Range for Class SA & Class SB Waters in MA	6.5-8.3; 1/Month/Grab[13]
	56. pH Range for Class B Waters in NH	6.5-8; 1/Month/Grab[13]
	57. Daily maximum temperature - Warm water fisheries	83°F; 1/Month/Grab[14]
	58. Daily maximum temperature - Cold water fisheries	68°F; 1/Month/Grab[14]
	59. Maximum Change in Temperature in MA - Any Class A water body	1.5°F; 1/Month/Grab[14]
	60. Maximum Change in Temperature in MA - Any Class B water body- Warm Water	5°F; 1/Month/Grab[14]
	61. Maximum Change in Temperature in MA – Any Class B water body - Cold water and Lakes/Ponds	3°F; 1/Month/Grab[14]
	62. Maximum Change in Temperature in MA – Any Class SA water body - Coastal	1.5°F; 1/Month/Grab[14]
	63. Maximum Change in Temperature in MA – Any Class SB water body - July to September	1.5°F; 1/Month/Grab[14]
	64. Maximum Change in Temperature in MA –Any Class SB water body - October to June	4°F; 1/Month/Grab[14]

Footnotes:

[1] Although the maximum values for TRC are 11ug/l and 7.5 ug/l for freshwater, and saltwater respectively, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., Method 330.5, 20 ug/l).
[2] Limits for cyanide are based on EPA's water quality criteria expressed as micrograms per liter. There is currently no EPA approved test method for free cyanide. Therefore, total cyanide must be reported.
[3] Although the maximum values for cyanide are 5.2 ug/l and 1.0 ug/l for freshwater and saltwater, respectively, the compliance limits are equal to the minimum level (ML) of the Method 335.4 as listed in Appendix VI (i.e., 10 ug/l).
[4] BTEX = sum of Benzene, Toluene, Ethylbenzene, and total Xylenes.
[5] Naphthalene can be reported as both a purgeable (VOC) and extractable (SVOC) organic compound. If both VOC and SVOC are analyzed, the highest value must be used unless the QC criteria for one of the analyses is not met. In such cases, the value from the analysis meeting the QC criteria must be used.
[6] The sum of individual phthalate compounds(not including the #34, Bis (2-Ethylhexyl) Phthalate . The compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.
Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measurement of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.
[7] Although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.
[8] In the November 2002 WQC, EPA has revised the definition of Total PCBs for aquatic life as total PCBs is the sum of all homologue, all isomer, all congener, or all "Oroclor analyses."Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measure of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.
[9]Although the maximum value for total PCBs is 0.000064 ug/l, the compliance limit is equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., 0.5 ug/l for Method 608 or 0.00005 ug/l when Method 1668a is approved).
[10] Hardness. Cadmium, Chromium III, Copper, Lead, Nickel, Silver, and Zinc are Hardness Dependent.
[11] For a Dilution Factor (DF) from 1 to 5, metals limits are calculated using DF times the base limit for the metal. See Appendix IV. For example, iron limits are calculated using DF x 1,000ug/L (the iron base limit). Therefore DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit =1,000 x 2 =2,000 ug/L., etc. not to exceed the DF=5.
[12] Minimum Level (ML) is the lowest level at which the analytical system gives a recognizable signal and acceptable calibration point for the analyte. The ML represents the lowest concentration at which an analyte can be measured with a known level of confidence. The ML is calculated by multiplying the laboratory-determined method detection limit by 3.18 (see 40 CFR Part 136, Appendix B).
[13] pH sampling for compliance with permit limits may be performed using field methods as provided for in EPA test Method 150.1.
[14] Temperature sampling per Method 170.1

ecs WHERE BUSINESS AND THE ENVIRONMENT CONVERGE

997 Millbury Street, Unit G, Worcester, MA 01607 tel 508.756.0151 fax 508.757.7063 www.ecsconsult.com

June 6, 2014
Project No. 03-218836.01

Mr. Victor Alvarez
U.S. Environmental Protection Agency
EPA-Region 1
5 Post Office Square
Mail Code OEP06-4
Boston, MA 02109-3912

RE: Notice of Intent for Remediation General Permit
City Square Development Project
Parcel F (3 Eaton Place) & Building E area (formerly known as 200 Front Street)
Worcester, MA 01608

Dear Mr. Alvarez:

Environmental Compliance Services, Inc. (ECS) herein provides supporting documentation for the Notice of Intent (NOI) for the Remediation General Permit (RGP) on behalf of City Square II Development Co, LLC (CSD) for the City Square Development project referenced above. This NOI is being submitted in order to obtain approval for the proposed discharge of treated groundwater via the operation of a temporary groundwater extraction and treatment system (GWTS). The groundwater dewatering activities are required to support the initial phases of the above-referenced City Square redevelopment project in downtown Worcester which includes the construction of a two-story sub-surface parking garage.

A Site Locus is provided as Figure 1, and a Site Plan depicting the dewatering discharge location is provided as Figure 2. A Flow Schematic of the dewatering treatment plan is included as Figure 3. A copy of the NOI form is provided as Attachment I.

System Design

Groundwater treatment will occur prior to discharge to the storm water manhole located along Trumbull Street, in the immediate vicinity of the redevelopment project. A plan detailing the location of the proposed redevelopment activities and the proposed storm water manhole discharge location is depicted on Figure 2.

The groundwater treatment system will include large capacity pumps to be utilized to extract groundwater from the excavation areas. The recovered groundwater will be pumped into sedimentation tanks and processed through particulate filters in order to remove suspended solids and un-dissolved chemical constituents. The average discharge flow rate of treated groundwater from the system to the storm water drainage system is estimated to be approximately 500 gallons per minute (gpm). The maximum discharge flow rate is estimated to be 750 gpm.

The treatment system will be sized appropriately to accommodate the anticipated flow. A line diagram of the groundwater treatment system is provided as Figure 3. Appropriately sized granular activated carbon (GAC) units will be available during the dewatering activities, but will only be utilized if conditions encountered warrant their use. The proposed discharge location for treated groundwater is a manhole located along the shoulder of Trumbull Street, located in the immediate vicinity of the redevelopment project. The discharge point in the City of Worcester storm water drainage system on Trumbull Street discharges into the Blackstone River, located approximately 1.5 miles south of the property. Approval from the City of Worcester to discharge to their storm water infrastructure will be obtained prior to discharge.

Influent Sample Analysis

In April and May, 2014, groundwater samples were collected from seven monitoring wells located within the boundaries of the area to be excavated. The location of these monitoring wells is shown on Figure 2. These samples were submitted to Spectrum Analytical, Inc. of Agawam, Massachusetts under standard chain of custody protocol for analysis of the NPDES permit parameters specified on Table 1. A summary of the groundwater analytical data with minimum, maximum and average detected concentrations is also presented on Table 1. Copies of the laboratory reports and chain of custody records are provided as Attachment II.

Groundwater analytical results were compared to the Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP) discharge criteria. Groundwater analytical results revealed one or more samples exhibiting detectable concentrations of bis(2-ethylhexyl)phthalate, arsenic, trivalent chromium, copper, iron, lead, silver, zinc, polychlorinated biphenyls (PCBs), total suspended solids, and total residual chlorine above the NPDES RGP criteria. Please note that when determining the average concentrations for the aforementioned constituents from all seven collected groundwater samples; arsenic, copper, iron, lead, silver and TSS were the only compounds that exceeded their respective NPDES RGP discharge criteria.

Groundwater analytical results of the samples collected from the monitoring wells were also compared to the Massachusetts Contingency Plan (MCP) RCGW-2 Reportable Concentrations. As noted on Table 1, all target analytes were reported below the applicable MCP RCGW-2 Reportable Concentrations.

Receiving Waters Information

The receiving water for the treated groundwater discharge is the Blackstone River, located approximately 1.5 miles south of the subject location. Based on data collected from the United States Geological Survey (USGS) and published in the Blackstone River Basin 1998 Water Quality Assessment Report prepared by Massachusetts Department of Environmental Protection (MassDEP) Division of Watershed Management, the 7-day, 10 year (7Q10) low flow rate for the receiving water was determined to be 43.649 cubic feet per second (cfs).

Receiving Water Classification

ECS consulted the MassDEP Division of Water Pollution Control website (http://www.mass.gov/eea/docs/dep/water/laws/i-thru-z/tblfig.pdf) to determine the classification for the receiving water. The Blackstone River is listed as Class B surface water.

Dilution Factor Application for Metals

For detected total metals concentrations, the RGP allows for a site-specific dilution factor (DF) to be calculated based on the expected maximum discharge flow rate and the 7Q10 of the receiving water. The calculated DF was applied to the average of the detected total metals concentrations which were greater than the applicable NPDES RGP discharge effluent limits. The DF is applicable to arsenic, copper, iron, lead, and silver, and the calculated DF was used to determine the appropriate Dilution Range concentrations for these metals. The DF was calculated using the following equation:

$$DF = (Qd + Qs)/Qd$$

where Qd is the maximum discharge flow rate from the system, assumed to be 750 gpm (1.671 cfs), and Qs is the receiving water flow rate, minimum for 7 consecutive days with a recurrence interval of 10 years (i.e. 7Q10), assumed to be 43.649 cfs (as indicated above). Using these values, the DF was calculated as 27.12. According to Appendix IV of the Remediation General Permit for Discharges in Massachusetts, the discharge limitations for the calculated dilution factor of 27.12 for arsenic, copper, iron, lead, and silver are 0.10 mg/L, 0.052 mg/L, 5 mg/L, 0.013 mg/L, and 0.012 mg/L, respectively. Groundwater analytical results indicate that only iron is above the applicable discharge limitation at the indicated dilution range.

Evaluation of Threatened or Endangered Species or Critical Habitat Located within Receiving Waters

According to Massachusetts Geographic Information Systems (MassGIS) online maps for the Natural Heritage Endangered Species Program (NHESP) (2008), no Priority Habitat of Rare Species or Estimated Habitats of Rare Wildlife are located within the proposed or immediately adjacent to the work zone area. The closest NHESP Estimated Habitats of Rare Wildlife in Wetland Areas/Protected Open Spaces are located approximately 4,000 feet northeast of the Site. Given the fact there will be an on-site dewatering treatment system and the discharge location at the surface water is down-flow from the NHESP area, it is the opinion of ECS that the discharge will not have an adverse affect on the NHESP Estimated Habitats of Rare Wildlife. Copies of the MassGIS Resource Priority and NHESP Maps of the subject area are included in Attachment III.

Review of National Register of Historic Places

Listings of Historic Places within the Site vicinity were obtained from the Massachusetts Cultural Resources Information System (MACRIS) online database at http://mhc-macris.net/towns.aspx (accessed June, 2014). Copies of the MACRIS report are provided as Attachment IV. The database indicated that there are no historic places located at or in the immediate vicinity of the proposed discharge area. This project does not involve the demolition or rehabilitation of historic properties.

Lastly, discharges in Massachusetts under the RGP are subject to MassDEP application form BRP WM 12 and a payment fee of $950.00. A copy of the MassDEP application form BRP WM 12 is included in Attachment V.

Should you have any questions or concerns regarding the contents of this NOI for the RGP, please do not hesitate to contact the undersigned at (508) 756-0151.

Sincerely,
ENVIRONMENTAL COMPLIANCE SERVICES, INC.

Charles Klingler, LSP, LEP
Branch Manager/Principal

cc: Michael Gerhardt, Leggat McCall Properties, 10 Post Office Square, Boston, MA 02109
Robert Kubit, MassDEP, Division of Watershed Management, 627 Main Street, Worcester, MA 01608
Paul J. Moosey, P.E., DPW Commissioner, 20 East Worcester Street, Worcester, MA, 01604
Matthew Lyons, Superintendent, Consigli Construction Co., Inc, 72 Sumner Street, Milford, MA 01757

LIST OF ATTACHMENTS

Figures
Figure 1: Site Locus
Figure 2: Site Plan
Figure 3: Flow Schematic

Tables
Table 1: Summary of Groundwater Analytical Data

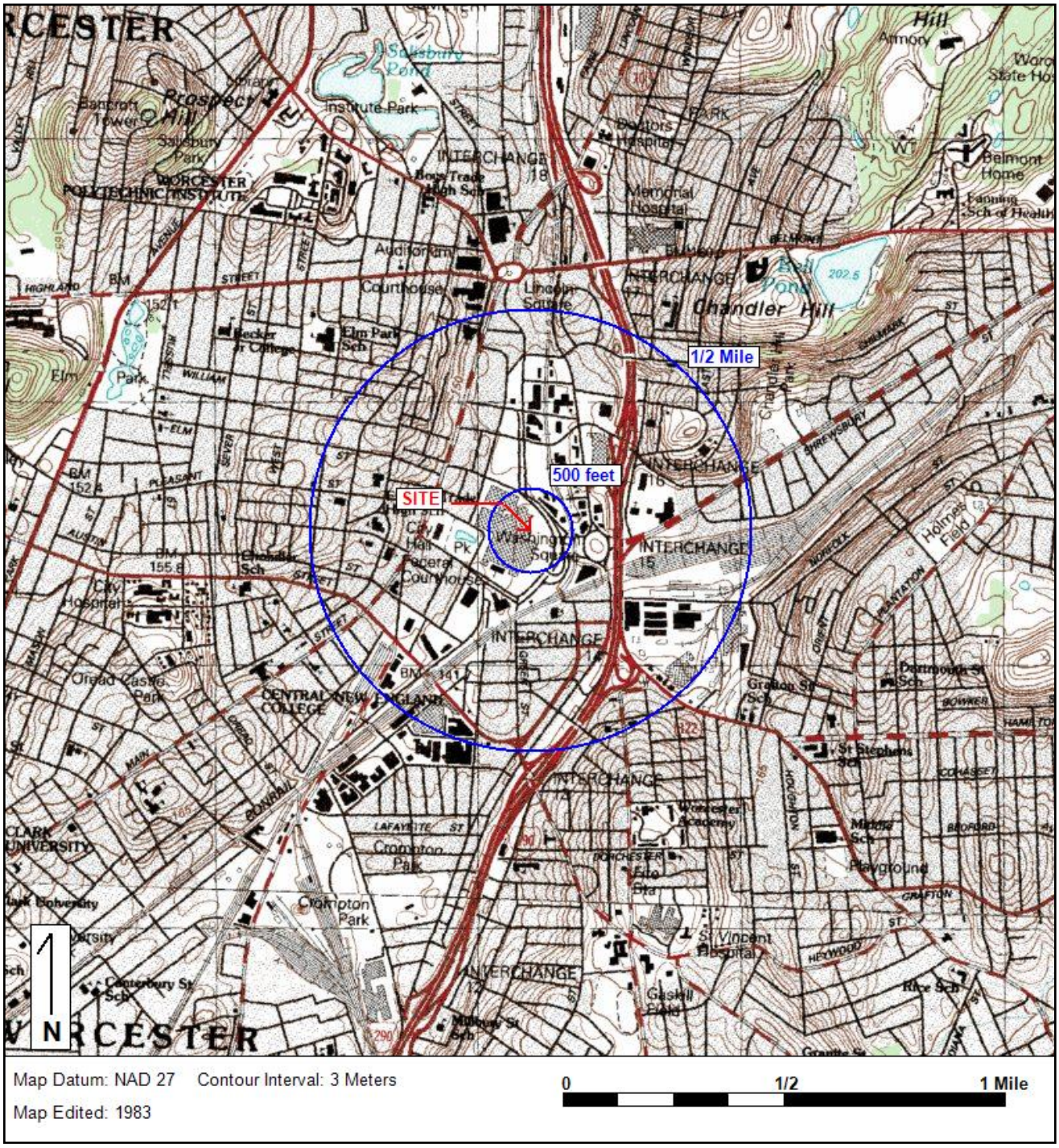
Attachment I: NOI for the RGP
Attachment II: Laboratory Analytical Reports and Chain of Custody Records
Attachment III: On-line MassGIS Resource Priority & NHESP Maps
Attachment IV: MACRIS Database Search Results
Attachment V: BRP WM 12 Transmittal Form

FIGURES

Environmental Compliance Services, Inc.
997 Millbury Street, Unit G
Worcester, MA 01607
Phone 508-756-0151 Fax 508-757-7063
www.ecsconsult.com

City Square - Building E (Parcel C)
100 Front Street
Worcester, MA 01607

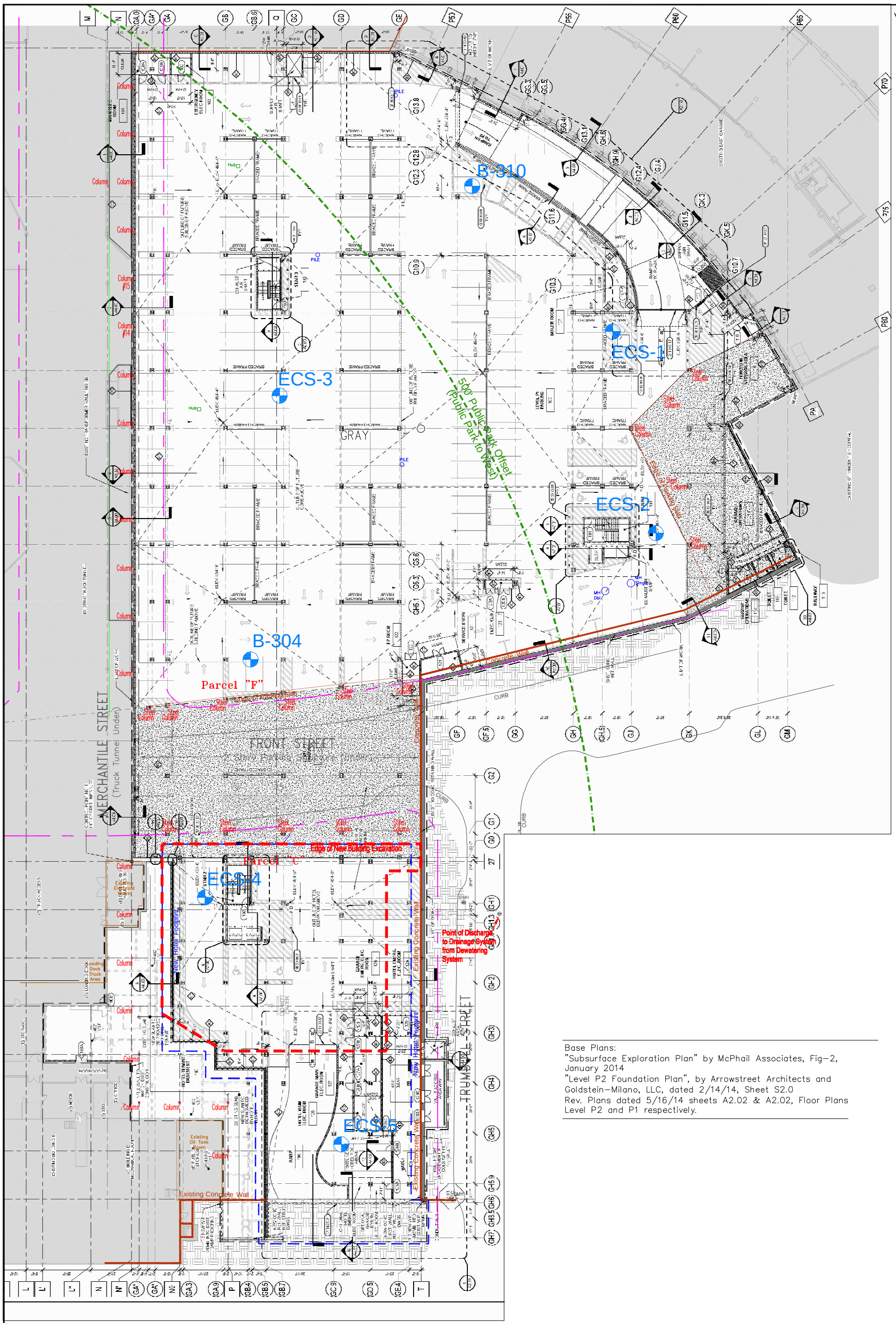
Figure 1: SITE LOCUS



Base Map: U.S. Geological Survey; Quadrangle Location: Worcester North, MA

Lat/Lon: 42 15' 45.9" NORTH, 71 47' 51.8" WEST - UTM Coordinates: 19 269246 EAST / 4682470.2 NORTH

Generated By: Carol Farrington



Base Plans:
"Subsurface Exploration Plan" by McPhail Associates, Fig-2, January 2014
"Level P2 Foundation Plan", by Arrowstreet Architects and Goldstein-Milano, LLC, dated 2/14/14, Sheet S2.0
Rev. Plans dated 5/16/14 sheets A2.02 & A2.02, Floor Plans Level P2 and P1 respectively.

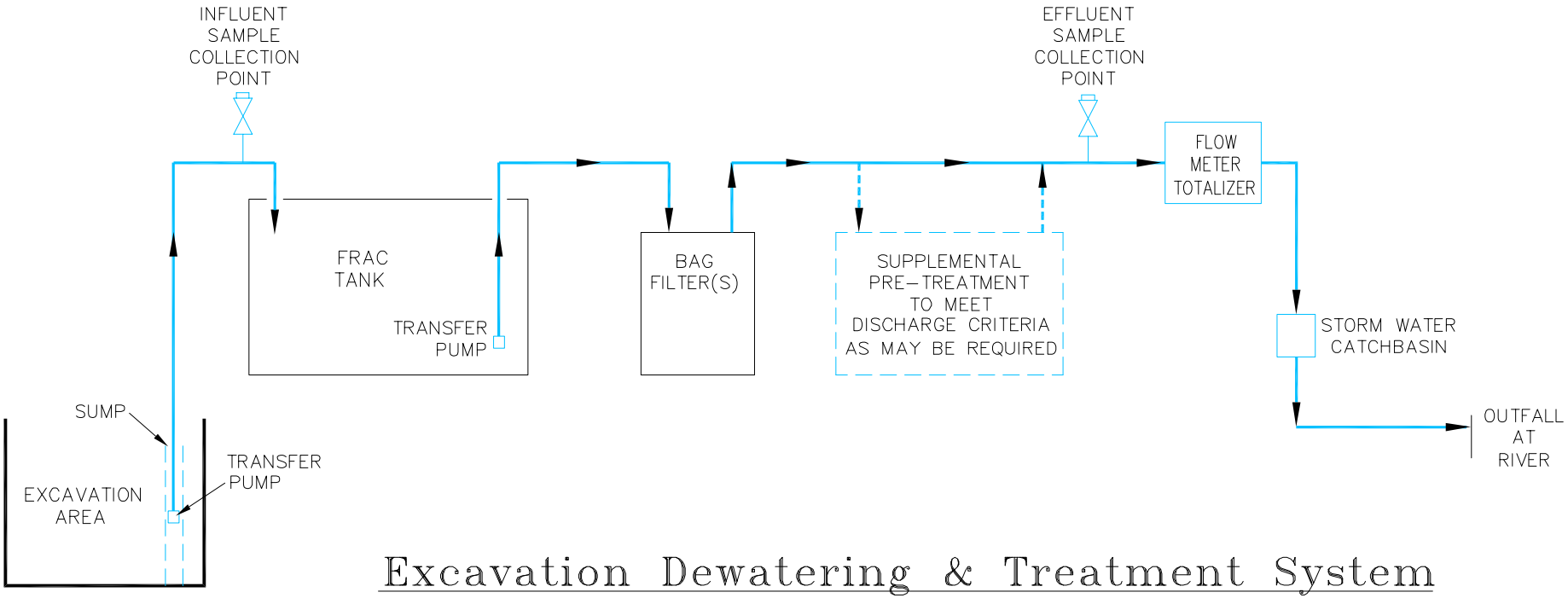
ecs
997 Milbury Street - Unit G * Worcester, MA 01607
Phone: 508-759-0151 Fax: 508-757-7063
ecsconsult.com

0 15 30
GRAPHIC SCALE:

PROJECT:
City Square
Front Street - Parcel "E" & "F"
Worcester, Massachusetts

TITLE:
Site Plan

CADFILE: 218836e.dwg			
DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
RAS	AK/CK	CK	CK
SCALE:	DATE:	JOB NO.:	FIGURE NO.:
1" = 30'	6/5/14	218836	2



Excavation Dewatering & Treatment System

Note:
System to be appropriately sized to handle the anticipated flow rate.

997 Milbury Street – Unit G * Worcester, MA 01607
Phone: 508-759-0151 Fax: 508-757-7063
www.ecsconsult.com

REVISIONS		
No.	Date	Description

PROJECT:
City Square
Front Street
Worcester, Massachusetts

TITLE:
Proposed Conceptual Treatment System Schematic

COMPUTER CADFILE : Dewater-sys.dwg

DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
RAS	MB/CK	MB/CK	CK
SCALE:	DATE:	JOB NO.:	FIGURE NO.:
NTS	6/4/14	218836	3

TABLES

Table 1
Summary of Groundwater Analytical Data

City Square (Parcel F)
Worcester, Massachusetts

Sample Location			ECS-1	ECS-2	ECS-3	B-304	B-310	ECS-4	ECS-5				EPA	EPA	MassDEP	MassDEP	MassDEP
Date			**04/28/14**	**04/28/14**	**04/28/14**	**04/28/14**	**04/28/14**	**05/07/14**	**05/07/14**	**MIN**	**MAX**	**AVE**	**Un-diluted**	**Discharge**	**RCGW-2**	**GW-3**	**GW-2**
GW Category			**GW-2 & 3**	**GW-2 & 3**	**GW-2 & 3**	**GW-2 & 3**	**GW-2 & 3**	**GW-2 & 3**	**GW-2 & 3**	**Conc.**	**Conc.**	**Conc.**	**Discharge**	**Limitation**			
Depth to Water (approximate -ft. below grade)			**5.02**	**3.40**	**2.61**	**3.25**	**5.62**	**7.26**	**8.13**				**Limit**	**w/dilution 1**			
VOCs by EPA Method SW846 8260 (ug/l)																	
Chloroform			<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1.14	<1.00	1.14	<1.00	NS	NA	50	20,000	50
1,2 - Dichloroethane			<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1.06	<1.00	1.06	<1.00	5	NA	5	20,000	5
Tetrachlorethene			<1.00	1.52	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1.52	<1.00	5	NA	50	30,000	50
1,2,3 - Trichlorobenzene			<1.00	1.73	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1.73	<1.00	NS	NA	NS	NS	NS
1,2,4 - Trichlorobenzene			<1.00	10.1	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	10.1	<2.00	NS	NA	2,000	50,000	2,000
Trichlorofluoromethane (Freon 11)			<1.00	4.21	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	4.21	<1.00	NS	NA	100,000	NS	NS
Tetrahydrofuran			<2.00	2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	2	<2.00	NS	NA	50,000	NS	NS
Total VOCs			ND	19.56	ND	ND	ND	ND	ND								
SVOCs by EPA Method SW846 8270 (ug/l)																	
Bis(2-ethylhexyl)phthalate			<5.38	<5.56	8.11	<6.02	<5.95	<5.26	<5.43	<5.26	8.11	<6.0	6	NA	50,000	50,000	NS
Total SVOCs			ND	ND	8.11	ND	ND	ND	ND								
TPH - SW846, 8100 Mod 8100M (mg/l)			<0.2	1.2	0.5	<0.2	<0.2	ND	ND	<0.2	1.2	<0.386	5	NA	5	5,000	5,000
Metals-Total (mg/l)																	
Antimony			<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	0.0056	0.06	8	8	NS
Arsenic			0.0774	0.0137	0.0042	0.0858	0.0046	<0.0040	0.0141	<0.0040	0.0858	0.0290	0.01	0.1	0.9	0.9	NS
Cadmium			<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.0002	0.002	0.004	0.004	NS
Chromium (Total)			0.0533	0.0099	<0.0050	0.0739	<0.0050	0.0057	0.0100	<0.0050	0.0739	<0.0260	NA	NA	0.3	0.3	NS
Chromium-Tri			0.0533	<0.0250	<0.0010	0.0739	<0.0100	<0.0100	0.0100	<0.0010	0.0739	<0.0260	0.0488	0.489	0.6	0.6	NS
Chromium-Hex			<0.050	<0.025	<0.005	<0.050	<0.005	<0.005	<0.005	<0.005	<0.050	<0.050	0.0114	0.114	0.3	0.3	NS
Copper			0.0386	0.0075	<0.0050	0.0567	<0.0050	<0.0050	<0.0050	<0.0050	0.0567	<0.018	0.0052	0.052	100	NS	NS
Iron			33.5	3.17	0.408	49.9	1.07	0.128	1.530	0.128	49.900	**12.815**	1.0000	5	NS	NS	NS
Mercury			<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.0009	0.0023	0.02	0.02	NS
Nickel			0.0476	0.0076	<0.0050	0.0780	<0.0050	<0.0050	0.0074	<0.0050	0.0474	<0.0222	0.0290	0.29	0.2	0.2	NS
Lead			0.0252	0.0078	<0.0075	0.0302	<0.0075	<0.0075	<0.0075	<0.0075	0.0302	<0.013	0.0050	0.013	0.01	0.01	NS
Dissolved Lead			<0.0075	NA	NA	<0.0075	NA	NA	NA	<0.0075	<0.0075	<0.0075	NA	NA	0.01	0.01	NS
Silver			<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0192	<0.0050	0.0192	<0.007	0.0012	0.012	0.007	0.007	NS
Selenium			<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.015	0.0050	0.05	0.1	0.1	NS
Zinc			0.0890	0.0164	<0.0090	0.140	<0.0090	0.0060	0.0118	<0.0090	0.1400	<0.040	0.0666	0.67	0.9	0.9	NS
PCBs-SW846 3510C 8082A (ug/l)			<0.211	0.570	<0.222	<0.235	<0.208	<0.233	<0.211	<0.208	0.57	<0.25	0.5	NA	5	10	5
Cyanide (total) (mg/l)			<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0093	<0.00500	<0.00500	0.0093	<0.006	0.01	NA	0.03	0.03	NS
Chloride (mg/l)			33.8	161	9.64	383	3.15	391	253	3.15	383	176.37	Monitor	Monitor	NS	NS	NS
TSS (mg/l)			726	150	8.0	5,100	79.0	<5.0	11.0	<5.0	5100.0	**866.1**	30	NA	NS	NS	NS
Total Residual Chlorine (mg/L)			<0.100	<0.020	<0.020	<0.100	<0.020	<0.020	0.042	<0.020	0.042	<0.04	0.02	NA	NS	NS	NS

Notes:

Bold - average concentration exceeds appropriate EPA discharge limit

Underline - individual constituent exceeds appropriate EPA un-diluted dischage limit or when non-detect and Reporting Limit exceeds EPA undiluted discharge limit

Only Detected Concentrations reported for VOC's and SVOC's

NA = Not Applicable

ug/l (micrograms per liter): ppb (parts per billion)

mg/l (milligrams per liter): ppm (parts per million)

NS = No Standard available

ND = Non-Detect

1). A dilution factor for the discharge to the Blackstone River was determined using the maximum anticipated discharge from the project and the 7Q10 of the Blackstone River. The DF was determined to be 27.12. Using the Table in Appendix IV of thre RGP instructions, the applicable dischage limitations for total metals that exceed the standard discharge values were obtained and are presented herein.

Yellow Highlight - above MCP RCGW-2 Reportable Concentration

ATTACHMENT I

B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit

1. General facility/site information. Please provide the following information about the site:

a) Name of **facility/site**: City Square Development		**Facility/site** mailing address:			
Location of **facility/site**: longitude: 714751 latitude: 421545	Facility SIC code(s): 1794	Street: 3 Eaton Place			
b) Name of **facility/site owner:**		Town: Worcester			
Email address of facility/site owner: donald.birch@lmp.com		State: MA	Zip: 01608	County: Worcester	
Telephone no. of facility/site **owner**: 617-422-7000					
Fax no. of facility/site **owner**: 617-556-9707		**Owner** is (check one): 1. Federal__○__ 2. State/Tribal__○__ 3. Private ⊙ 4. Other __○__ if so, describe:			
Address of **owner** (if different from site):					
Street: 10 Post Office Square					
Town: Boston	State: MA	Zip: 02109	County: Suffolk		
c) Legal name of **operator**: Consigli Construction Company	**Operator** telephone no: 508-473-2580				
	Operator fax no.: 508-473-3588	**Operator** email: mlyons@consigli.com			
Operator contact name and title: Matthew Lyons, Superintendent					
Address of **operator** (if different from owner):	Street: 72 Sumner Street				
Town: Milford	State: MA	Zip: 01757	County: Worcester South		

d) Check Y for "yes" or N for "no" for the following:
1. Has a prior NPDES permit exclusion been granted for the discharge? Y___ N___, if Y, number:___
2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge?
Y___ N___, if Y, date and tracking #:___
3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Y___ N___
4. For sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) and exempt from state permitting? Y___ N___

e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y___ N___
If Y, please list:
1. site identification # assigned by the state of NH or MA:___
2. permit or license # assigned:___
3. state agency contact information: name, location, and telephone number:

f) Is the site/facility covered by any other EPA permit, including:
1. Multi-Sector General Permit? Y___ N___,
if Y, number:___
2. Final Dewatering General Permit? Y___ N___,
if Y, number:___
3. EPA Construction General Permit? Y___ N___,
if Y, number:___
4. Individual NPDES permit? Y___ N___,
if Y, number:___
5. any other water quality related individual or general permit? Y___ N___, if Y, number:___

g) Is the site/facility located within or does it discharge to an Area of Critical Environmental Concern (ACEC)? Y___ N___

h) Based on the facility/site information and any historical sampling data, identify the sub-category into which the potential discharge falls.

Activity Category	**Activity Sub-Category**
I - Petroleum Related Site Remediation	A. Gasoline Only Sites ___ B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) ___ C. Petroleum Sites with Additional Contamination ___
II - Non Petroleum Site Remediation	A. Volatile Organic Compound (VOC) Only Sites ___ B. VOC Sites with Additional Contamination ___ C. Primarily Heavy Metal Sites ___
III - Contaminated Construction Dewatering	A. General Urban Fill Sites ___ B. Known Contaminated Sites ___

IV - Miscellaneous Related Discharges	A. Aquifer Pump Testing to Evaluate Formerly Contaminated Sites ☐ B. Well Development/Rehabilitation at Contaminated/Formerly Contaminated Sites ☐ C. Hydrostatic Testing of Pipelines and Tanks ☐ D. Long-Term Remediation of Contaminated Sumps and Dikes ☐ E. Short-term Contaminated Dredging Drain Back Waters (if not covered by 401/404 permit) ☐

2. Discharge information. Please provide information about the discharge, (attaching additional sheets as necessary) including:

a) Describe the discharge activities for which the owner/applicant is seeking coverage:

Temporary construction dewatering

b) Provide the following information about each discharge:

1) Number of discharge points: 1

2) What is the **maximum** and **average flow rate** of discharge (in cubic feet per second, ft^3/s)?
Max. flow 1.671 Is maximum flow a **design value**? Y ○ N ◉
Average flow (include units) 1.114 cubic ft/s Is average flow a design value or estimate? Estimate

3) Latitude and longitude of each discharge within 100 feet:

pt.1: lat 421545	long 714751	pt.2: lat.	long. ;
pt.3: lat	long	pt.4: lat.	long. ;
pt.5: lat	long	pt.6: lat.	long. ;
pt.7: lat	long	pt.8: lat.	long. ; etc.

4) If hydrostatic testing, total volume of the discharge (gals):

5) Is the discharge intermittent ◉ or seasonal ○ ?
Is discharge ongoing? Y ○ N ◉

c) Expected dates of discharge (mm/dd/yy): start 6/23/2014 end 12/30/2014

d) Please attach a line drawing or flow schematic showing water flow through the facility including:
1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s). Flow Schematic is attached.

3. Contaminant information.

a) Based on the sub-category selected (see Appendix III), indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids (TSS)		☐	☒	7	Grab	SM2540D	5,000	5,100,000		866,100	
2. Total Residual Chlorine (TRC)		☒	☐	7	Grab	300	20	42		<40	
3. Total Petroleum Hydrocarbons (TPH)		☒	☐	7	Grab	8100	200	1,200		<386	
4. Cyanide (CN)	57125	☒	☐	7	Grab	335.4	5.0	9.3		<6.0	
5. Benzene (B)	71432	☒	☐	7	Grab	8260C	1.0	<1.0			
6. Toluene (T)	108883	☒	☐	7	Grab	8260C	1.0	<1.0			
7. Ethylbenzene (E)	100414	☒	☐	7	Grab	8260C	1.0	<1.0			
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐	7	Grab	8260C	1.0	<3.0			
9. Total BTEX [2]	n/a	☒	☐	7	Grab	8260C	1.0	<6.0			
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) [3]	106934	☒	☐	7	Grab	8260C	0.5	<0.5			
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐	7	Grab	8260C	1.0	<1.0			
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐	7	Grab	8260C	1.0	<1.0			

***** Numbering system is provided to allow cross-referencing to Effluent Limits and Monitoring Requirements by Sub-Category included in Appendix III, as well as the Test Methods and Minimum Levels associated with each parameter provided in Appendix VI.

[2] BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

[3] EDB is a groundwater contaminant at fuel spill and pesticide application sites in New England.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
13. tert-Amyl Methyl Ether (TAME)	9940508	☒	☐	7	Grab	8260C	1.0	<1.0			
14. Naphthalene	91203	☒	☐	7	Grab	8260C	1.0	<1.0			
15. Carbon Tetrachloride	56235	☒	☐	7	Grab	8260C	1.0	<1.0			
16. 1,2 Dichlorobenzene (o-DCB)	95501	☒	☐	7	Grab	8260C	1.0	<1.0			
17. 1,3 Dichlorobenzene (m-DCB)	541731	☒	☐	7	Grab	8260C	1.0	<1.0			
18. 1,4 Dichlorobenzene (p-DCB)	106467	☒	☐	7	Grab	8260C	1.0	<1.0			
18a. Total dichlorobenzene		☒	☐	7	Grab	8260C	1.0	<1.0			
19. 1,1 Dichloroethane (DCA)	75343	☒	☐	7	Grab	8260C	1.0	<1.0			
20. 1,2 Dichloroethane (DCA)	107062	☒	☐	7	Grab	8260C	1.0	1.06		<1.0	
21. 1,1 Dichloroethene (DCE)	75354	☒	☐	7	Grab	8260C	1.0	<1.0			
22. cis-1,2 Dichloroethene (DCE)	156592	☒	☐	7	Grab	8260C	1.0	<1.0			
23. Methylene Chloride	75092	☒	☐	7	Grab	8260C	1.0	<1.0			
24. Tetrachloroethene (PCE)	127184	☒	☐	7	Grab	8260C	1.0	1.52		<1.0	
25. 1,1,1 Trichloro-ethane (TCA)	71556	☒	☐	7	Grab	8260	1.0	<1.0			
26. 1,1,2 Trichloro-ethane (TCA)	79005	☒	☐	7	Grab	8260C	1.0	<1.0			
27. Trichloroethene (TCE)	79016	☒	☐	7	Grab	8260C	1.0	<1.0			

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
28. Vinyl Chloride (Chloroethene)	75014	☒	☐	7	Grab	8260C	1.0	<1.0			
29. Acetone	67641	☒	☐	7	Grab	8260C	10	<10			
30. 1,4 Dioxane	123911	☒	☐	7	Grab	8260C	20	<20			
31. Total Phenols	108952	☒	☐	7	Grab	8270D	5.10	<5.10			
32. Pentachlorophenol (PCP)	87865	☒	☐	7	Grab	8270D	21.5	<21.5			
33. Total Phthalates (Phthalate esters) [4]		☒	☐	0							
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☒	☐	7	Grab	8270D	5.26	8.11		<6.0	
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	7	Grab	8270D	5.10	<5.10			
a. Benzo(a) Anthracene	56553	☒	☐	7	Grab	8270D	5.10	<5.10			
b. Benzo(a) Pyrene	50328	☒	☐	7	Grab	8270D	5.10	<5.10			
c. Benzo(b)Fluoranthene	205992	☒	☐	7	Grab	8270D	5.10	<5.10			
d. Benzo(k)Fluoranthene	207089	☒	☐	7	Grab	8270D	5.10	<5.10			
e. Chrysene	21801	☒	☐	7	Grab	8270D	5.10	<5.10			
f. Dibenzo(a,h)anthracene	53703	☒	☐	7	Grab	8270D	5.10	<5.10			
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐	7	Grab	8270D	5.10	<5.10			
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	7	Grab	8270D	5.10	<5.10			

[4] The sum of individual phthalate compounds.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
h. Acenaphthene	83329	☒	☐	7	Grab	8270D	5.10	<5.10			
i. Acenaphthylene	208968	☒	☐	7	Grab	8270D	5.10	<5.10			
j. Anthracene	120127	☒	☐	7	Grab	8270D	5.10	<5.10			
k. Benzo(ghi) Perylene	191242	☒	☐	7	Grab	8270D	5.10	<5.10			
l. Fluoranthene	206440	☒	☐	7	Grab	8270D	5.10	<5.10			
m. Fluorene	86737	☒	☐	7	Grab	8270D	5.10	<5.10			
n. Naphthalene	91203	☒	☐	7	Grab	8270D	5.10	<5.10			
o. Phenanthrene	85018	☒	☐	7	Grab	8270D	5.10	<5.10			
p. Pyrene	129000	☒	☐	7	Grab	8270D	5.10	<5.10			
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐	7	Grab	SW846 3510	0.208	0.57		<0.25	
38. Chloride	16887006	☐	☒	7	Grab	300	1,000	383,000		176,370	
39. Antimony	7440360	☒	☐	7	Grab	6010C	6.0	<6.0			
40. Arsenic	7440382	☐	☒	7	Grab	6010C	4.0	85.8		29	
41. Cadmium	7440439	☒	☐	7	Grab	6010C	2.5	<2.5			
42. Chromium III (trivalent)	16065831	☒	☐	7	Grab	6010C	1.0	73.9		<26	
43. Chromium VI (hexavalent)	18540299	☒	☐	7	Grab	6010C	5	<50			
44. Copper	7440508	☒	☐	7	Grab	6010C	5	56.7		<18	
45. Lead	7439921	☒	☐	2	Grab	6010C	7.5	30.2		<13	
46. Mercury	7439976	☒	☐	7	Grab	6010C	0.2	<0.2			
47. Nickel	7440020	☒	☐	7	Grab	6010C	5	47.4		<22.2	
48. Selenium	7782492	☒	☐	7	Grab	6010C	15	<15			
49. Silver	7440224	☒	☐	7	Grab	6010C	5	19.2		<7	
50. Zinc	7440666	☒	☐	7	Grab	6010C	9	140		<40	
51. Iron	7439896	☐	☒	7	Grab	6010C	15	49,900		12,815	
Other (describe):		☐	☐								

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1,2,4 Trichlorobenzene	120-82-1	☒	☐	7	Grab	8260C	1.0	10.0		<2.0	
Trichlorofluoromethane	75-69-4	☒	☐	7	Grab	8260C	1.0	4.21		<1.0	

b) For discharges where **metals** are believed present, please fill out the following (attach results of any calculations):

Step 1: Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y_⊙_ N_○_	If yes, which metals? Arsenic, Copper, Iron, Lead, Silver
Step 2: For any metals which exceed the **Appendix III** limits, calculate the **dilution factor (DF)** using the formula in Part I.A.3.c (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metal: Arsenic DF: 27.12 Metal: Copper DF: 27.12 Metal: Iron DF: 27.12 Metal: Lead, Silver DF: 27.12 Etc.	Look up the limit calculated at the corresponding dilution factor in **Appendix IV.** Do any of the metals in the **influent** have the potential to exceed the corresponding **effluent** limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y_⊙_ N_○_ If Y, list which metals: Iron

4. Treatment system information. Please describe the treatment system using separate sheets as necessary, including:

a) A description of the treatment system, including a schematic of the proposed or existing treatment system:

See attached Figure 3

b) Identify each applicable treatment unit (check all that apply):	Frac. tank ☒	Air stripper ☐	Oil/water separator ☐	Equalization tanks ☐	Bag filter ☒	GAC filter ☐
	Chlorination ☐	De-chlorination ☐	Other (please describe):	GAC Filters will be available to be added to the treatment train but will not be used unless results require such use.		

c) Proposed **average** and **maximum flow rates** (gallons per minute) for the discharge and the **design flow rate**(s) (gallons per minute) of the treatment system:
Average flow rate of discharge 500 gpm Maximum flow rate of treatment system 750 gpm
Design flow rate of treatment system 500 gpm

d) A description of chemical additives being used or planned to be used (attach MSDS sheets):
None

5. Receiving surface water(s). Please provide information about the receiving water(s), using separate sheets as necessary:

a) Identify the discharge pathway:	Direct to receiving water_☐__	Within facility (sewer) _☐__	Storm drain_☒__	Wetlands ☐	Other (describe):

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:
Effluent will be discharged to stormdrain manhole located on Trumbull Street. The storm drain discharges to the Blackstone River.

c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:
1. For multiple discharges, number the discharges sequentially.
2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water
The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.

d) Provide the state water quality classification of the receiving water Class B

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 43.649 cfs
Please attach any calculation sheets used to support stream flow and dilution calculations.

f) Is the receiving water a listed 303(d) water quality impaired or limited water? Y_○__ N_⊙__ If yes, for which pollutant(s)?

Is there a final TMDL? Y_○__ N_⊙__ If yes, for which pollutant(s)?

6. ESA and NHPA Eligibility.

Please provide the following information according to requirements of Permit Parts I.A.4 and I.A.5 Appendices II and VII.

a) Using the instructions in Appendix VII and information on Appendix II, under which criterion listed in Part I.C are you eligible for coverage under this general permit?

A ___ B ___ C ___ D ___ E ___ F ___

b) If you selected Criterion D or F, has consultation with the federal services been completed? Y___ N___ Underway___

c) If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received? Y___ N___

d) Attach documentation of ESA eligibility as described in the NOI instructions and required by Appendix VII, Part I.C, Step 4.

e) Using the instructions in Appendix VII, under which criterion listed in Part II.C are you eligible for coverage under this general permit?

1 ___ 2 ___ 3 ___

f) If Criterion 3 was selected, attach all written correspondence with the State or Tribal historic preservation officers, including any terms and conditions that outline measures the applicant must follow to mitigate or prevent adverse effects due to activities regulated by the RGP.

7. Supplemental information.

Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

Analytical Certificates are attached. Based on a review of the MassDEP Resource Priority Map and the MassGIS Priority Habitat and Estimated Habitat Natural Heritage and Endangered Species Program Map, no areas of priority or estimated habitats or rare species were identified at the Site/work zone area relative to the proposed discharge (see attached maps). Therefore, it was determined that Criterion A in Section 6 (a) was applicable.

8. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility/Site Name:	City Square Development
Operator signature:	Matthew A Lyons
Printed Name &Title:	Matthew A Lyons Superintendent
Date:	6·6·14

ATTACHMENT II

Report Date:
01-May-14 15:36

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Environmental Compliance Services
997 Millbury Street, Unit G
Worcester, MA 01607
Attn: Charles Klingler

Project: City Square-Front St.-Worcester, MA
Project #: 03-218836

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB88395-01	ECS-1	Ground Water	28-Apr-14 00:00	28-Apr-14 17:55
SB88395-02	ECS-2	Ground Water	28-Apr-14 00:00	28-Apr-14 17:55
SB88395-03	ECS-3	Ground Water	28-Apr-14 00:00	28-Apr-14 17:55
SB88395-04	B-304	Ground Water	28-Apr-14 00:00	28-Apr-14 17:55
SB88395-05	B-310	Ground Water	28-Apr-14 00:00	28-Apr-14 17:55
SB88395-06	Trip Blank	Aqueous	28-Apr-14 00:00	28-Apr-14 17:55

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435

Authorized by:

Nicole Leja
Laboratory Director

Spectrum Analytical holds certification in the State of Massachusetts for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of Massachusetts does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.
Please note that this report contains 61 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, NJ-MA012, PA-68-04426 and FL-E87936).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

MassDEP Analytical Protocol Certification Form

Laboratory Name: Spectrum Analytical, Inc.	**Project #:** 03-218836
Project Location: City Square-Front St.-Worcester, MA	**RTN:**
This form provides certifications for the following data set:	SB88395-01 through SB88395-06
Matrices: Aqueous Ground Water	

CAM Protocol

✓ 8260 VOC CAM II A	✓ 7470/7471 Hg CAM III B	MassDEP VPH CAM IV A	8081 Pesticides CAM V B	✓ 7196 Hex Cr CAM VI B	MassDEP APH CAM IX A
✓ 8270 SVOC CAM II B	7010 Metals CAM III C	MassDEP EPH CAM IV B	8151 Herbicides CAM V C	8330 Explosives CAM VIII A	TO-15 VOC CAM IX B
✓ 6010 Metals CAM III A	6020 Metals CAM III D	✓ 8082 PCB CAM V A	✓ 9012 Total Cyanide/PAC CAM VI A	9014 Total Cyanide/PAC CAM VI A	6860 Perchlorate CAM VIII B

Affirmative responses to questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	✓ Yes No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	✓ Yes No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	✓ Yes No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	✓ Yes No
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes No Yes No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to questions A through E)?	✓ Yes No

Responses to questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes ✓ No

Data User Note: ***Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.***

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes ✓ No
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes ✓ No

All negative responses are addressed in a case narrative on the cover page of this report.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Nicole Leja

Nicole Leja
Laboratory Director
Date: 5/1/2014

CASE NARRATIVE:

Data has been reported to the RDL. This report excludes estimated concentrations detected below the RDL and above the MDL (J-Flag).

The samples were received 3.4 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

MADEP has published a list of analytical methods (CAM) which provides a series of recommended protocols for the acquisition, analysis and reporting of analytical data in support of MCP decisions. "Presumptive Certainty" can be established only for those methods published by the MADEP in the MCP CAM. The compounds and/or elements reported were specifically requested by the client on the Chain of Custody and in some cases may not include the full analyte list as defined in the method. Regulatory limits may not be achieved if specific method and/or technique was not requested on the Chain of Custody.

According to WSC-CAM 5/2009 Rev.1, Table 11 A-1, recovery for some VOC analytes have been deemed potentially difficult. Although they may still be within the recommended recovery range, a range has been set based on historical control limits.

Some target analytes which are not listed as exceptions in the Summary of CAM Reporting Limits may exceed the recommended RL based on sample initial volume or weight provided, % moisture content, or responsiveness of a particular analyte to purge and trap instrumentation.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

Calculation

Samples:

SB88395-01 *ECS-1*

The Reporting Limit has been raised to account for matrix interference.

Trivalent Chromium

SB88395-02 *ECS-2*

The Reporting Limit has been raised to account for matrix interference.

Trivalent Chromium

SB88395-04 *B-304*

The Reporting Limit has been raised to account for matrix interference.

Trivalent Chromium

EPA 300.0

Samples:

SB88395-02 *ECS-2*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

SB88395-04 *B-304*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

SM3500-Cr-B/7196A

Samples:

SM3500-Cr-B/7196A

Samples:

SB88395-01 *ECS-1*

The Reporting Limit has been raised to account for matrix interference.

Hexavalent Chromium

SB88395-02 *ECS-2*

The Reporting Limit has been raised to account for matrix interference.

Hexavalent Chromium

SB88395-04 *B-304*

The Reporting Limit has been raised to account for matrix interference.

Hexavalent Chromium

SM4500-Cl-G

Samples:

SB88395-01 *ECS-1*

The collection time was not indicated on the chain of custody. Therefore, the analysis hold time can not be verified.

Total Residual Chlorine

SB88395-02 *ECS-2*

The collection time was not indicated on the chain of custody. Therefore, the analysis hold time can not be verified.

Total Residual Chlorine

SB88395-03 *ECS-3*

The collection time was not indicated on the chain of custody. Therefore, the analysis hold time can not be verified.

Total Residual Chlorine

SB88395-04 *B-304*

The collection time was not indicated on the chain of custody. Therefore, the analysis hold time can not be verified.

Total Residual Chlorine

SB88395-05 *B-310*

The collection time was not indicated on the chain of custody. Therefore, the analysis hold time can not be verified.

Total Residual Chlorine

SW846 6010C

Duplicates:

1409265-DUP1 *Source: SB88395-03*

Analyses are not controlled on RPD values from sample concentrations that are less than 5 times the reporting level. The batch is accepted based upon the difference between the sample and duplicate is less than or equal to the reporting limit.

Arsenic
Zinc

SW846 8260C

Calibration:

1404065

SW846 8260C

Calibration:

1404065

Analyte quantified by quadratic equation type calibration.

1,1,1,2-Tetrachloroethane
1,1,1-Trichloroethane
1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,2,4-Trimethylbenzene
1,2-Dibromo-3-chloropropane
1,2-Dibromoethane (EDB)
1,3,5-Trichlorobenzene
1,3,5-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2-Chlorotoluene
2-Hexanone (MBK)
4-Chlorotoluene
4-Isopropyltoluene
4-Methyl-2-pentanone (MIBK)
Bromodichloromethane
Bromoform
Carbon tetrachloride
Chloroform
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Hexachlorobutadiene
m,p-Xylene
Naphthalene
n-Butylbenzene
n-Propylbenzene
sec-Butylbenzene
Styrene
Tert-amyl methyl ether
tert-Butylbenzene
trans-1,3-Dichloropropene
trans-1,4-Dichloro-2-butene

This affected the following samples:

1409321-BLK1
1409321-BS1
1409321-BSD1
B-304
B-310
ECS-1
ECS-2
ECS-3
S404261-ICV1
S404409-CCV1
Trip Blank

Blanks:

1409321-BLK1

The method blank contains analyte at a concentration above the MRL, however no reportable concentration is present in the sample.

Tert-amyl methyl ether

SW846 8260C

Laboratory Control Samples:

1409321 BS/BSD

Acetone percent recoveries (141/97) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

B-304
B-310
ECS-1
ECS-2
ECS-3
Trip Blank

1409321 BSD

1,4-Dioxane RPD 37% (20%) is outside individual acceptance criteria.

2-Butanone (MEK) RPD 31% (20%) is outside individual acceptance criteria.

Acetone RPD 36% (20%) is outside individual acceptance criteria.

1409321-BS1

Analyte is found in the associated blank as well as in the sample (CLP B-flag).

Tert-amyl methyl ether

1409321-BSD1

Analyte is found in the associated blank as well as in the sample (CLP B-flag).

Tert-amyl methyl ether

Samples:

S404409-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

2-Butanone (MEK) (23.2%)
Acetone (40.6%)

This affected the following samples:

1409321-BLK1
1409321-BS1
1409321-BSD1
B-304
B-310
ECS-1
ECS-2
ECS-3
Trip Blank

SW846 8270D

Calibration:

1404037

SW846 8270D

Calibration:

1404037

Analyte quantified by quadratic equation type calibration.

2,4-Dinitrophenol
4,6-Dinitro-2-methylphenol
4-Nitrophenol
Benzidine
Benzoic acid
Carbazole
N-Nitrosodiphenylamine

This affected the following samples:

1409280-BLK1
1409280-BS1
1409280-BSD1
B-304
B-310
ECS-1
ECS-2
ECS-3
S403916-ICV1
S404506-CCV1
S404525-CCV1

Laboratory Control Samples:

1409280 BS/BSD

3-Nitroaniline percent recoveries (143/150) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

B-304
B-310
ECS-1
ECS-2
ECS-3

Benzoic acid percent recoveries (20/22) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

B-304
B-310
ECS-1
ECS-2
ECS-3

Carbazole percent recoveries (175/178) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

B-304
B-310
ECS-1
ECS-2
ECS-3

SW846 8270D

Laboratory Control Samples:

1409280 BS/BSD

N-Nitrosodiphenylamine percent recoveries (136/125) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

B-304
B-310
ECS-1
ECS-2
ECS-3

Phenol percent recoveries (31/24) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

B-304
B-310
ECS-1
ECS-2
ECS-3

Pyridine percent recoveries (32/31) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

B-304
B-310
ECS-1
ECS-2
ECS-3

1409280 BSD

3 & 4-Methylphenol RPD 23% (20%) is outside individual acceptance criteria.

4-Nitrophenol RPD 23% (20%) is outside individual acceptance criteria.

Phenol RPD 27% (20%) is outside individual acceptance criteria.

1409280-BSD1

Acid surrogate recovery outside of control limits. The data was accepted based on valid recovery of remaining two acid surrogates.

Phenol-d5

RPD out of acceptance range. The batch is accepted based upon LCS and/or LCSD recovery.

Phenol

Samples:

S404506-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

3,3´-Dichlorobenzidine (37.0%)
3-Nitroaniline (78.2%)
4-Nitroaniline (48.4%)
Benzo (k) fluoranthene (-21.0%)
Hexachlorocyclopentadiene (22.5%)
Isophorone (-20.4%)

SW846 8270D

Samples:

S404506-CCV1

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

4-Nitrophenol (57.9%)
Benzidine (49.1%)
Carbazole (70.3%)
N-Nitrosodiphenylamine (57.0%)

This affected the following samples:

1409280-BLK1
1409280-BS1
1409280-BSD1
B-304
B-310
ECS-1
ECS-2
ECS-3

Sample Acceptance Check Form

Client:	Environmental Compliance Services - Worcester, MA
Project:	City Square-Front St.-Worcester, MA / 03-218836
Work Order:	SB88395
Sample(s) received on:	4/28/2014
Received by:	Mary Wilson

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	Yes	No	N/A
1. Were custody seals present?	☐	☑	☐
2. Were custody seals intact?	☐	☐	☑
3. Were samples received at a temperature of ≤ 6°C?	☑	☐	☐
4. Were samples cooled on ice upon transfer to laboratory representative?	☐	☑	☐
5. Were samples refrigerated upon transfer to laboratory representative?	☑	☐	☐
6. Were sample containers received intact?	☑	☐	☐
7. Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	☑	☐	☐
8. Were samples accompanied by a Chain of Custody document?	☑	☐	☐
9. Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	☐	☑	☐
10. Did sample container labels agree with Chain of Custody document?	☑	☐	☐
11. Were samples received within method-specific holding times?	☑	☐	☐

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-1	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	29-Apr-14	30-Apr-14	NAA	1409321	
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-1	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-01				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	29-Apr-14	30-Apr-14	NAA	1409321	
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*99*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*102*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*99*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*97*			*70-130 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds Prepared by method SW846 3510C													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-1	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds Prepared by method SW846 3510C													
83-32-9	Acenaphthene	< 5.38		µg/l	5.38	0.968	1	SW846 8270D	29-Apr-14	29-Apr-14	MSL	1409280	
208-96-8	Acenaphthylene	< 5.38		µg/l	5.38	0.935	1	"	"	"	"	"	
62-53-3	Aniline	< 5.38		µg/l	5.38	0.677	1	"	"	"	"	"	
120-12-7	Anthracene	< 5.38		µg/l	5.38	0.968	1	"	"	"	"	"	
103-33-3	Azobenzene/Diphenyldiazene	< 5.38		µg/l	5.38	0.806	1	"	"	"	"	"	
92-87-5	Benzidine	< 5.38		µg/l	5.38	4.70	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	< 5.38		µg/l	5.38	1.28	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	< 5.38		µg/l	5.38	0.935	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	< 5.38		µg/l	5.38	0.914	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	< 5.38		µg/l	5.38	0.968	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	< 5.38		µg/l	5.38	1.19	1	"	"	"	"	"	
65-85-0	Benzoic acid	< 5.38		µg/l	5.38	2.33	1	"	"	"	"	"	
100-51-6	Benzyl alcohol	< 5.38		µg/l	5.38	1.00	1	"	"	"	"	"	
111-91-1	Bis(2-chloroethoxy)methane	< 5.38		µg/l	5.38	0.753	1	"	"	"	"	"	
111-44-4	Bis(2-chloroethyl)ether	< 5.38		µg/l	5.38	0.903	1	"	"	"	"	"	
108-60-1	Bis(2-chloroisopropyl)ether	< 5.38		µg/l	5.38	1.05	1	"	"	"	"	"	
117-81-7	Bis(2-ethylhexyl)phthalate	< 5.38		µg/l	5.38	1.10	1	"	"	"	"	"	
101-55-3	4-Bromophenyl phenyl ether	< 5.38		µg/l	5.38	0.914	1	"	"	"	"	"	
85-68-7	Butyl benzyl phthalate	< 5.38		µg/l	5.38	1.11	1	"	"	"	"	"	
86-74-8	Carbazole	< 5.38		µg/l	5.38	3.45	1	"	"	"	"	"	
59-50-7	4-Chloro-3-methylphenol	< 5.38		µg/l	5.38	1.02	1	"	"	"	"	"	
106-47-8	4-Chloroaniline	< 5.38		µg/l	5.38	0.602	1	"	"	"	"	"	
91-58-7	2-Chloronaphthalene	< 5.38		µg/l	5.38	0.935	1	"	"	"	"	"	
95-57-8	2-Chlorophenol	< 5.38		µg/l	5.38	1.03	1	"	"	"	"	"	
7005-72-3	4-Chlorophenyl phenyl ether	< 5.38		µg/l	5.38	0.957	1	"	"	"	"	"	
218-01-9	Chrysene	< 5.38		µg/l	5.38	1.23	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	< 5.38		µg/l	5.38	1.00	1	"	"	"	"	"	
132-64-9	Dibenzofuran	< 5.38		µg/l	5.38	0.946	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5.38		µg/l	5.38	1.05	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5.38		µg/l	5.38	1.03	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5.38		µg/l	5.38	1.08	1	"	"	"	"	"	
91-94-1	3,3´-Dichlorobenzidine	< 5.38		µg/l	5.38	0.731	1	"	"	"	"	"	
120-83-2	2,4-Dichlorophenol	< 5.38		µg/l	5.38	0.882	1	"	"	"	"	"	
84-66-2	Diethyl phthalate	< 5.38		µg/l	5.38	0.925	1	"	"	"	"	"	
131-11-3	Dimethyl phthalate	< 5.38		µg/l	5.38	0.978	1	"	"	"	"	"	
105-67-9	2,4-Dimethylphenol	< 5.38		µg/l	5.38	0.871	1	"	"	"	"	"	
84-74-2	Di-n-butyl phthalate	< 5.38		µg/l	5.38	1.01	1	"	"	"	"	"	
534-52-1	4,6-Dinitro-2-methylphenol	< 5.38		µg/l	5.38	0.720	1	"	"	"	"	"	
51-28-5	2,4-Dinitrophenol	< 5.38		µg/l	5.38	3.09	1	"	"	"	"	"	
121-14-2	2,4-Dinitrotoluene	< 5.38		µg/l	5.38	1.01	1	"	"	"	"	"	
606-20-2	2,6-Dinitrotoluene	< 5.38		µg/l	5.38	1.01	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-1	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-01				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds Prepared by method SW846 3510C													
117-84-0	Di-n-octyl phthalate	< 5.38		µg/l	5.38	0.839	1	SW846 8270D	29-Apr-14	29-Apr-14	MSL	1409280	
206-44-0	Fluoranthene	< 5.38		µg/l	5.38	1.03	1	"	"	"	"	"	
86-73-7	Fluorene	< 5.38		µg/l	5.38	0.968	1	"	"	"	"	"	
118-74-1	Hexachlorobenzene	< 5.38		µg/l	5.38	1.00	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 5.38		µg/l	5.38	0.892	1	"	"	"	"	"	
77-47-4	Hexachlorocyclopentadiene	< 5.38		µg/l	5.38	5.08	1	"	"	"	"	"	
67-72-1	Hexachloroethane	< 5.38		µg/l	5.38	1.09	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	< 5.38		µg/l	5.38	0.989	1	"	"	"	"	"	
78-59-1	Isophorone	< 5.38		µg/l	5.38	0.892	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	< 5.38		µg/l	5.38	0.978	1	"	"	"	"	"	
95-48-7	2-Methylphenol	< 5.38		µg/l	5.38	1.03	1	"	"	"	"	"	
108-39-4, 106-44-5	3 & 4-Methylphenol	< 10.8		µg/l	10.8	1.01	1	"	"	"	"	"	
91-20-3	Naphthalene	< 5.38		µg/l	5.38	0.957	1	"	"	"	"	"	
88-74-4	2-Nitroaniline	< 5.38		µg/l	5.38	0.882	1	"	"	"	"	"	
99-09-2	3-Nitroaniline	< 5.38		µg/l	5.38	0.688	1	"	"	"	"	"	
100-01-6	4-Nitroaniline	< 21.5		µg/l	21.5	0.774	1	"	"	"	"	"	
98-95-3	Nitrobenzene	< 5.38		µg/l	5.38	1.02	1	"	"	"	"	"	
88-75-5	2-Nitrophenol	< 5.38		µg/l	5.38	1.11	1	"	"	"	"	"	
100-02-7	4-Nitrophenol	< 21.5		µg/l	21.5	3.00	1	"	"	"	"	"	
62-75-9	N-Nitrosodimethylamine	< 5.38		µg/l	5.38	1.09	1	"	"	"	"	"	
621-64-7	N-Nitrosodi-n-propylamine	< 5.38		µg/l	5.38	0.989	1	"	"	"	"	"	
86-30-6	N-Nitrosodiphenylamine	< 5.38		µg/l	5.38	1.03	1	"	"	"	"	"	
87-86-5	Pentachlorophenol	< 21.5		µg/l	21.5	0.871	1	"	"	"	"	"	
85-01-8	Phenanthrene	< 5.38		µg/l	5.38	0.935	1	"	"	"	"	"	
108-95-2	Phenol	< 5.38		µg/l	5.38	1.02	1	"	"	"	"	"	
129-00-0	Pyrene	< 5.38		µg/l	5.38	1.38	1	"	"	"	"	"	
110-86-1	Pyridine	< 5.38		µg/l	5.38	1.04	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 5.38		µg/l	5.38	0.989	1	"	"	"	"	"	
90-12-0	1-Methylnaphthalene	< 5.38		µg/l	5.38	1.00	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 5.38		µg/l	5.38	0.892	1	"	"	"	"	"	
88-06-2	2,4,6-Trichlorophenol	< 5.38		µg/l	5.38	0.839	1	"	"	"	"	"	
82-68-8	Pentachloronitrobenzene	< 5.38		µg/l	5.38	0.978	1	"	"	"	"	"	
95-94-3	1,2,4,5-Tetrachlorobenzene	< 5.38		µg/l	5.38	1.03	1	"	"	"	"	"	
Surrogate recoveries:													
321-60-8	*2-Fluorobiphenyl*	*64*			*30-130 %*			"	"	"	"	"	
367-12-4	*2-Fluorophenol*	*37*			*15-110 %*			"	"	"	"	"	
4165-60-0	*Nitrobenzene-d5*	*74*			*30-130 %*			"	"	"	"	"	
4165-62-2	*Phenol-d5*	*22*			*15-110 %*			"	"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*80*			*30-130 %*			"	"	"	"	"	
118-79-6	*2,4,6-Tribromophenol*	*87*			*15-110 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GC													
Polychlorinated Biphenyls Prepared by method SW846 3510C													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-1 SB88395-01	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GC													
Polychlorinated Biphenyls Prepared by method SW846 3510C													
12674-11-2	Aroclor-1016	< 0.211		µg/l	0.211	0.127	1	SW846 8082A	29-Apr-14	30-Apr-14	IMR	1409281	
11104-28-2	Aroclor-1221	< 0.211		µg/l	0.211	0.161	1	"	"	"	"	"	
11141-16-5	Aroclor-1232	< 0.211		µg/l	0.211	0.141	1	"	"	"	"	"	
53469-21-9	Aroclor-1242	< 0.211		µg/l	0.211	0.123	1	"	"	"	"	"	
12672-29-6	Aroclor-1248	< 0.211		µg/l	0.211	0.103	1	"	"	"	"	"	
11097-69-1	Aroclor-1254	< 0.211		µg/l	0.211	0.129	1	"	"	"	"	"	
11096-82-5	Aroclor-1260	< 0.211		µg/l	0.211	0.129	1	"	"	"	"	"	
37324-23-5	Aroclor-1262	< 0.211		µg/l	0.211	0.116	1	"	"	"	"	"	
11100-14-4	Aroclor-1268	< 0.211		µg/l	0.211	0.0979	1	"	"	"	"	"	
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*65*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*60*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*30*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*35*			*30-150 %*			"	"	"	"	"	
Extractable Petroleum Hydrocarbons													
Fingerprinting by GC Prepared by method SW846 3510C													
8006-61-9	Gasoline	< 0.2		mg/l	0.2	0.1	1	SW846 8100Mod.	29-Apr-14	29-Apr-14	SEP	1409279	
68476-30-2	Fuel Oil #2	< 0.2		mg/l	0.2	0.1	1	"	"	"	"	"	
68476-31-3	Fuel Oil #4	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
68553-00-4	Fuel Oil #6	< 0.2		mg/l	0.2	0.2	1	"	"	"	"	"	
M09800000	Motor Oil	< 0.2		mg/l	0.2	0.2	1	"	"	"	"	"	
8032-32-4	Ligroin	< 0.2		mg/l	0.2	0.06	1	"	"	"	"	"	
J00100000	Aviation Fuel	< 0.2		mg/l	0.2	0.06	1	"	"	"	"	"	
	Hydraulic Oil	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
	Dielectric Fluid	< 0.2		mg/l	0.2	0.06	1	"	"	"	"	"	
	Unidentified	< 0.2		mg/l	0.2	0.06	1	"	"	"	"	"	
	Other Oil	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
Surrogate recoveries:													
3386-33-2	*1-Chlorooctadecane*	*53*			*40-140 %*			"	"	"	"	"	
Total Metals by EPA 200/6000 Series Methods													
	Preservation	**Lab Preserved**		N/A			1	EPA 200/6000 methods	28-Apr-14	28-Apr-14	BJW	1409204	
Total Metals by EPA 6000/7000 Series Methods													
7440-22-4	Silver	< 0.0050		mg/l	0.0050	0.0011	1	SW846 6010C	30-Apr-14	30-Apr-14	TBC	1409265	
7440-38-2	Arsenic	**0.0774**		mg/l	0.0040	0.0019	1	"	"	"	"	"	
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0012	1	"	"	"	"	"	
7440-47-3	Chromium	**0.0533**		mg/l	0.0050	0.0014	1	"	"	"	"	"	
7440-50-8	Copper	**0.0386**		mg/l	0.0050	0.0022	1	"	"	"	"	"	
7439-89-6	Iron	**33.5**		mg/l	0.0150	0.0122	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-1 SB88395-01	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Total Metals by EPA 6000/7000 Series Methods													
7440-02-0	Nickel	**0.0476**		mg/l	0.0050	0.0014	1	SW846 6010C	30-Apr-14	30-Apr-14	TBC	1409265	
7439-92-1	Lead	**0.0252**		mg/l	0.0075	0.0032	1	"	"	"	"	"	
7440-36-0	Antimony	< 0.0060		mg/l	0.0060	0.0022	1	"	"	"	"	"	
7782-49-2	Selenium	< 0.0150		mg/l	0.0150	0.0067	1	"	"	"	"	"	
7440-66-6	Zinc	**0.0890**		mg/l	0.0090	0.0024	1	"	"	"	"	"	
Total Metals by EPA 200 Series Methods													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.00008	1	EPA 245.1/7470A	30-Apr-14	30-Apr-14	LR	1409262	X
General Chemistry Parameters													
16065-83-1	Trivalent Chromium	**0.0533**	R01	mg/l	0.0500	0.0053	1	Calculation	30-Apr-14	30-Apr-14	TBC	1409265	
7782-50-5	Total Residual Chlorine	< 0.100	HT3,ClH T	mg/l	0.100	0.028	1	SM4500-Cl-G	29-Apr-14 10:44	29-Apr-14 15:41	TD/CA	1409336	X
16887-00-6	Chloride	**33.8**		mg/l	1.00	0.295	1	EPA 300.0	29-Apr-14	01-May-1 4	CAW	1409382	X
18540-29-9	Hexavalent Chromium	< 0.050	R01,LIV	mg/l	0.050	0.033	1	SM3500-Cr-B/71 96A	28-Apr-14 18:58	28-Apr-14 19:26	TD/CA	1409263	
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00419	1	EPA 335.4 / SW846 9012B	29-Apr-14	30-Apr-14	RLT	1409385	X
	Total Suspended Solids	**726**	LIV	mg/l	10.0	4.3	1	SM2540D	29-Apr-14	30-Apr-14	CMB	1409299	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-2	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-02				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	29-Apr-14	30-Apr-14	NAA	1409321	
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-2	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-02				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	29-Apr-14	30-Apr-14	NAA	1409321	
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	**1.52**		µg/l	1.00	0.74	1	"	"	"	"	"	
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	**1.73**		µg/l	1.00	0.38	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	**10.1**		µg/l	1.00	0.36	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	**4.21**		µg/l	1.00	0.63	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	**2.00**		µg/l	2.00	1.44	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*89*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*104*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*100*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*99*			*70-130 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds Prepared by method SW846 3510C													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-2	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-02				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds Prepared by method SW846 3510C													
83-32-9	Acenaphthene	< 5.56		µg/l	5.56	1.00	1	SW846 8270D	29-Apr-14	29-Apr-14	MSL	1409280	
208-96-8	Acenaphthylene	< 5.56		µg/l	5.56	0.967	1	"	"	"	"	"	
62-53-3	Aniline	< 5.56		µg/l	5.56	0.700	1	"	"	"	"	"	
120-12-7	Anthracene	< 5.56		µg/l	5.56	1.00	1	"	"	"	"	"	
103-33-3	Azobenzene/Diphenyldiazene	< 5.56		µg/l	5.56	0.833	1	"	"	"	"	"	
92-87-5	Benzidine	< 5.56		µg/l	5.56	4.86	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	< 5.56		µg/l	5.56	1.32	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	< 5.56		µg/l	5.56	0.967	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	< 5.56		µg/l	5.56	0.944	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	< 5.56		µg/l	5.56	1.00	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	< 5.56		µg/l	5.56	1.23	1	"	"	"	"	"	
65-85-0	Benzoic acid	< 5.56		µg/l	5.56	2.41	1	"	"	"	"	"	
100-51-6	Benzyl alcohol	< 5.56		µg/l	5.56	1.03	1	"	"	"	"	"	
111-91-1	Bis(2-chloroethoxy)methane	< 5.56		µg/l	5.56	0.778	1	"	"	"	"	"	
111-44-4	Bis(2-chloroethyl)ether	< 5.56		µg/l	5.56	0.933	1	"	"	"	"	"	
108-60-1	Bis(2-chloroisopropyl)ether	< 5.56		µg/l	5.56	1.09	1	"	"	"	"	"	
117-81-7	Bis(2-ethylhexyl)phthalate	< 5.56		µg/l	5.56	1.13	1	"	"	"	"	"	
101-55-3	4-Bromophenyl phenyl ether	< 5.56		µg/l	5.56	0.944	1	"	"	"	"	"	
85-68-7	Butyl benzyl phthalate	< 5.56		µg/l	5.56	1.14	1	"	"	"	"	"	
86-74-8	Carbazole	< 5.56		µg/l	5.56	3.57	1	"	"	"	"	"	
59-50-7	4-Chloro-3-methylphenol	< 5.56		µg/l	5.56	1.06	1	"	"	"	"	"	
106-47-8	4-Chloroaniline	< 5.56		µg/l	5.56	0.622	1	"	"	"	"	"	
91-58-7	2-Chloronaphthalene	< 5.56		µg/l	5.56	0.967	1	"	"	"	"	"	
95-57-8	2-Chlorophenol	< 5.56		µg/l	5.56	1.07	1	"	"	"	"	"	
7005-72-3	4-Chlorophenyl phenyl ether	< 5.56		µg/l	5.56	0.989	1	"	"	"	"	"	
218-01-9	Chrysene	< 5.56		µg/l	5.56	1.27	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	< 5.56		µg/l	5.56	1.03	1	"	"	"	"	"	
132-64-9	Dibenzofuran	< 5.56		µg/l	5.56	0.978	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5.56		µg/l	5.56	1.09	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5.56		µg/l	5.56	1.07	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5.56		µg/l	5.56	1.11	1	"	"	"	"	"	
91-94-1	3,3´-Dichlorobenzidine	< 5.56		µg/l	5.56	0.756	1	"	"	"	"	"	
120-83-2	2,4-Dichlorophenol	< 5.56		µg/l	5.56	0.911	1	"	"	"	"	"	
84-66-2	Diethyl phthalate	< 5.56		µg/l	5.56	0.956	1	"	"	"	"	"	
131-11-3	Dimethyl phthalate	< 5.56		µg/l	5.56	1.01	1	"	"	"	"	"	
105-67-9	2,4-Dimethylphenol	< 5.56		µg/l	5.56	0.900	1	"	"	"	"	"	
84-74-2	Di-n-butyl phthalate	< 5.56		µg/l	5.56	1.04	1	"	"	"	"	"	
534-52-1	4,6-Dinitro-2-methylphenol	< 5.56		µg/l	5.56	0.744	1	"	"	"	"	"	
51-28-5	2,4-Dinitrophenol	< 5.56		µg/l	5.56	3.19	1	"	"	"	"	"	
121-14-2	2,4-Dinitrotoluene	< 5.56		µg/l	5.56	1.04	1	"	"	"	"	"	
606-20-2	2,6-Dinitrotoluene	< 5.56		µg/l	5.56	1.04	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-2	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-02				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds Prepared by method SW846 3510C													
117-84-0	Di-n-octyl phthalate	< 5.56		µg/l	5.56	0.867	1	SW846 8270D	29-Apr-14	29-Apr-14	MSL	1409280	
206-44-0	Fluoranthene	< 5.56		µg/l	5.56	1.07	1	"	"	"	"	"	
86-73-7	Fluorene	< 5.56		µg/l	5.56	1.00	1	"	"	"	"	"	
118-74-1	Hexachlorobenzene	< 5.56		µg/l	5.56	1.03	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 5.56		µg/l	5.56	0.922	1	"	"	"	"	"	
77-47-4	Hexachlorocyclopentadiene	< 5.56		µg/l	5.56	5.24	1	"	"	"	"	"	
67-72-1	Hexachloroethane	< 5.56		µg/l	5.56	1.12	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	< 5.56		µg/l	5.56	1.02	1	"	"	"	"	"	
78-59-1	Isophorone	< 5.56		µg/l	5.56	0.922	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	< 5.56		µg/l	5.56	1.01	1	"	"	"	"	"	
95-48-7	2-Methylphenol	< 5.56		µg/l	5.56	1.07	1	"	"	"	"	"	
108-39-4, 106-44-5	3 & 4-Methylphenol	< 11.1		µg/l	11.1	1.04	1	"	"	"	"	"	
91-20-3	Naphthalene	< 5.56		µg/l	5.56	0.989	1	"	"	"	"	"	
88-74-4	2-Nitroaniline	< 5.56		µg/l	5.56	0.911	1	"	"	"	"	"	
99-09-2	3-Nitroaniline	< 5.56		µg/l	5.56	0.711	1	"	"	"	"	"	
100-01-6	4-Nitroaniline	< 22.2		µg/l	22.2	0.800	1	"	"	"	"	"	
98-95-3	Nitrobenzene	< 5.56		µg/l	5.56	1.06	1	"	"	"	"	"	
88-75-5	2-Nitrophenol	< 5.56		µg/l	5.56	1.14	1	"	"	"	"	"	
100-02-7	4-Nitrophenol	< 22.2		µg/l	22.2	3.10	1	"	"	"	"	"	
62-75-9	N-Nitrosodimethylamine	< 5.56		µg/l	5.56	1.12	1	"	"	"	"	"	
621-64-7	N-Nitrosodi-n-propylamine	< 5.56		µg/l	5.56	1.02	1	"	"	"	"	"	
86-30-6	N-Nitrosodiphenylamine	< 5.56		µg/l	5.56	1.07	1	"	"	"	"	"	
87-86-5	Pentachlorophenol	< 22.2		µg/l	22.2	0.900	1	"	"	"	"	"	
85-01-8	Phenanthrene	< 5.56		µg/l	5.56	0.967	1	"	"	"	"	"	
108-95-2	Phenol	< 5.56		µg/l	5.56	1.06	1	"	"	"	"	"	
129-00-0	Pyrene	< 5.56		µg/l	5.56	1.42	1	"	"	"	"	"	
110-86-1	Pyridine	< 5.56		µg/l	5.56	1.08	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	**5.78**		µg/l	5.56	1.02	1	"	"	"	"	"	
90-12-0	1-Methylnaphthalene	< 5.56		µg/l	5.56	1.03	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 5.56		µg/l	5.56	0.922	1	"	"	"	"	"	
88-06-2	2,4,6-Trichlorophenol	< 5.56		µg/l	5.56	0.867	1	"	"	"	"	"	
82-68-8	Pentachloronitrobenzene	< 5.56		µg/l	5.56	1.01	1	"	"	"	"	"	
95-94-3	1,2,4,5-Tetrachlorobenzene	< 5.56		µg/l	5.56	1.07	1	"	"	"	"	"	
Surrogate recoveries:													
321-60-8	*2-Fluorobiphenyl*	*64*			*30-130 %*			"	"	"	"	"	
367-12-4	*2-Fluorophenol*	*43*			*15-110 %*			"	"	"	"	"	
4165-60-0	*Nitrobenzene-d5*	*75*			*30-130 %*			"	"	"	"	"	
4165-62-2	*Phenol-d5*	*25*			*15-110 %*			"	"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*90*			*30-130 %*			"	"	"	"	"	
118-79-6	*2,4,6-Tribromophenol*	*96*			*15-110 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GC													
Polychlorinated Biphenyls Prepared by method SW846 3510C													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-2 SB88395-02	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GC													
Polychlorinated Biphenyls Prepared by method SW846 3510C													
12674-11-2	Aroclor-1016	< 0.233		µg/l	0.233	0.141	1	SW846 8082A	29-Apr-14	30-Apr-14	IMR	1409281	
11104-28-2	Aroclor-1221	< 0.233		µg/l	0.233	0.178	1	"	"	"	"	"	
11141-16-5	Aroclor-1232	< 0.233		µg/l	0.233	0.156	1	"	"	"	"	"	
53469-21-9	Aroclor-1242	< 0.233		µg/l	0.233	0.136	1	"	"	"	"	"	
12672-29-6	Aroclor-1248	< 0.233		µg/l	0.233	0.114	1	"	"	"	"	"	
11097-69-1	Aroclor-1254	< 0.233		µg/l	0.233	0.143	1	"	"	"	"	"	
11096-82-5	Aroclor-1260	**0.570**		µg/l	0.233	0.143	1	"	"	"	"	"	
37324-23-5	Aroclor-1262	< 0.233		µg/l	0.233	0.128	1	"	"	"	"	"	
11100-14-4	Aroclor-1268	< 0.233		µg/l	0.233	0.108	1	"	"	"	"	"	
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*105*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*105*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*80*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*80*			*30-150 %*			"	"	"	"	"	
Extractable Petroleum Hydrocarbons													
Fingerprinting by GC Prepared by method SW846 3510C													
8006-61-9	Gasoline	< 0.2		mg/l	0.2	0.1	1	SW846 8100Mod.	29-Apr-14	29-Apr-14	SEP	1409279	
68476-30-2	Fuel Oil #2	< 0.2		mg/l	0.2	0.1	1	"	"	"	"	"	
68476-31-3	Fuel Oil #4	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
68553-00-4	Fuel Oil #6	< 0.2		mg/l	0.2	0.2	1	"	"	"	"	"	
M09800000	Motor Oil	< 0.2		mg/l	0.2	0.2	1	"	"	"	"	"	
8032-32-4	Ligroin	< 0.2		mg/l	0.2	0.06	1	"	"	"	"	"	
J00100000	Aviation Fuel	< 0.2		mg/l	0.2	0.06	1	"	"	"	"	"	
	Hydraulic Oil	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
	Dielectric Fluid	< 0.2		mg/l	0.2	0.06	1	"	"	"	"	"	
	Unidentified	**1.2**		mg/l	0.2	0.06	1	"	"	"	"	"	
	Other Oil	**Calculated as**		mg/l	0.2	0.02	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	**1.2**		mg/l	0.2	0.02	1	"	"	"	"	"	
Surrogate recoveries:													
3386-33-2	*1-Chlorooctadecane*	*69*			*40-140 %*			"	"	"	"	"	
Total Metals by EPA 200/6000 Series Methods													
	Preservation	**Field Preserved**		N/A			1	EPA 200/6000 methods			BJW	1409204	
Total Metals by EPA 6000/7000 Series Methods													
7440-22-4	Silver	< 0.0050		mg/l	0.0050	0.0011	1	SW846 6010C	30-Apr-14	30-Apr-14	TBC	1409265	
7440-38-2	Arsenic	**0.0137**		mg/l	0.0040	0.0019	1	"	"	"	"	"	
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0012	1	"	"	"	"	"	
7440-47-3	Chromium	**0.0099**		mg/l	0.0050	0.0014	1	"	"	"	"	"	
7440-50-8	Copper	**0.0075**		mg/l	0.0050	0.0022	1	"	"	"	"	"	
7439-89-6	Iron	**3.17**		mg/l	0.0150	0.0122	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-2 SB88395-02	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Total Metals by EPA 6000/7000 Series Methods													
7440-02-0	Nickel	**0.0076**		mg/l	0.0050	0.0014	1	SW846 6010C	30-Apr-14	30-Apr-14	TBC	1409265	
7439-92-1	Lead	**0.0078**		mg/l	0.0075	0.0032	1	"	"	"	"	"	
7440-36-0	Antimony	< 0.0060		mg/l	0.0060	0.0022	1	"	"	"	"	"	
7782-49-2	Selenium	< 0.0150		mg/l	0.0150	0.0067	1	"	"	"	"	"	
7440-66-6	Zinc	**0.0164**		mg/l	0.0090	0.0024	1	"	"	"	"	"	
Total Metals by EPA 200 Series Methods													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.00008	1	EPA 245.1/7470A	30-Apr-14	30-Apr-14	LR	1409262	X
General Chemistry Parameters													
16065-83-1	Trivalent Chromium	< 0.0250	R01	mg/l	0.0250	0.0053	1	Calculation	30-Apr-14	30-Apr-14	TBC	1409265	
7782-50-5	Total Residual Chlorine	< 0.020	HT3,ClHT	mg/l	0.020	0.006	1	SM4500-Cl-G	29-Apr-14 10:44	29-Apr-14 15:43	TD/CA	1409336	X
16887-00-6	Chloride	**161**	D, GS1	mg/l	12.0	3.54	12	EPA 300.0	29-Apr-14	01-May-14	CAW	1409382	X
18540-29-9	Hexavalent Chromium	< 0.025	R01,LIV	mg/l	0.025	0.016	1	SM3500-Cr-B/7196A	28-Apr-14 18:58	28-Apr-14 19:28	TD/CA	1409263	
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00419	1	EPA 335.4 / SW846 9012B	29-Apr-14	30-Apr-14	RLT	1409385	X
	Total Suspended Solids	**150**		mg/l	5.0	2.2	1	SM2540D	29-Apr-14	30-Apr-14	CMB	1409299	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-3	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-03				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	29-Apr-14	30-Apr-14	NAA	1409321	
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-3	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-03				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	29-Apr-14	30-Apr-14	NAA	1409321	
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*90*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*105*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*101*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*100*			*70-130 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds Prepared by method SW846 3510C													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-3	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-03				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds Prepared by method SW846 3510C													
83-32-9	Acenaphthene	< 5.10		µg/l	5.10	0.918	1	SW846 8270D	29-Apr-14	30-Apr-14	MSL	1409280	
208-96-8	Acenaphthylene	< 5.10		µg/l	5.10	0.888	1	"	"	"	"	"	
62-53-3	Aniline	< 5.10		µg/l	5.10	0.643	1	"	"	"	"	"	
120-12-7	Anthracene	< 5.10		µg/l	5.10	0.918	1	"	"	"	"	"	
103-33-3	Azobenzene/Diphenyldiazene	< 5.10		µg/l	5.10	0.765	1	"	"	"	"	"	
92-87-5	Benzidine	< 5.10		µg/l	5.10	4.46	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	< 5.10		µg/l	5.10	1.21	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	< 5.10		µg/l	5.10	0.888	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	< 5.10		µg/l	5.10	0.867	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	< 5.10		µg/l	5.10	0.918	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	< 5.10		µg/l	5.10	1.13	1	"	"	"	"	"	
65-85-0	Benzoic acid	< 5.10		µg/l	5.10	2.21	1	"	"	"	"	"	
100-51-6	Benzyl alcohol	< 5.10		µg/l	5.10	0.949	1	"	"	"	"	"	
111-91-1	Bis(2-chloroethoxy)methane	< 5.10		µg/l	5.10	0.714	1	"	"	"	"	"	
111-44-4	Bis(2-chloroethyl)ether	< 5.10		µg/l	5.10	0.857	1	"	"	"	"	"	
108-60-1	Bis(2-chloroisopropyl)ether	< 5.10		µg/l	5.10	1.00	1	"	"	"	"	"	
117-81-7	Bis(2-ethylhexyl)phthalate	**8.11**		µg/l	5.10	1.04	1	"	"	"	"	"	
101-55-3	4-Bromophenyl phenyl ether	< 5.10		µg/l	5.10	0.867	1	"	"	"	"	"	
85-68-7	Butyl benzyl phthalate	< 5.10		µg/l	5.10	1.05	1	"	"	"	"	"	
86-74-8	Carbazole	< 5.10		µg/l	5.10	3.28	1	"	"	"	"	"	
59-50-7	4-Chloro-3-methylphenol	< 5.10		µg/l	5.10	0.969	1	"	"	"	"	"	
106-47-8	4-Chloroaniline	< 5.10		µg/l	5.10	0.571	1	"	"	"	"	"	
91-58-7	2-Chloronaphthalene	< 5.10		µg/l	5.10	0.888	1	"	"	"	"	"	
95-57-8	2-Chlorophenol	< 5.10		µg/l	5.10	0.980	1	"	"	"	"	"	
7005-72-3	4-Chlorophenyl phenyl ether	< 5.10		µg/l	5.10	0.908	1	"	"	"	"	"	
218-01-9	Chrysene	< 5.10		µg/l	5.10	1.16	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	< 5.10		µg/l	5.10	0.949	1	"	"	"	"	"	
132-64-9	Dibenzofuran	< 5.10		µg/l	5.10	0.898	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5.10		µg/l	5.10	1.00	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5.10		µg/l	5.10	0.980	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5.10		µg/l	5.10	1.02	1	"	"	"	"	"	
91-94-1	3,3´-Dichlorobenzidine	< 5.10		µg/l	5.10	0.694	1	"	"	"	"	"	
120-83-2	2,4-Dichlorophenol	< 5.10		µg/l	5.10	0.837	1	"	"	"	"	"	
84-66-2	Diethyl phthalate	< 5.10		µg/l	5.10	0.878	1	"	"	"	"	"	
131-11-3	Dimethyl phthalate	< 5.10		µg/l	5.10	0.929	1	"	"	"	"	"	
105-67-9	2,4-Dimethylphenol	< 5.10		µg/l	5.10	0.827	1	"	"	"	"	"	
84-74-2	Di-n-butyl phthalate	< 5.10		µg/l	5.10	0.959	1	"	"	"	"	"	
534-52-1	4,6-Dinitro-2-methylphenol	< 5.10		µg/l	5.10	0.684	1	"	"	"	"	"	
51-28-5	2,4-Dinitrophenol	< 5.10		µg/l	5.10	2.93	1	"	"	"	"	"	
121-14-2	2,4-Dinitrotoluene	< 5.10		µg/l	5.10	0.959	1	"	"	"	"	"	
606-20-2	2,6-Dinitrotoluene	< 5.10		µg/l	5.10	0.959	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-3	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-03				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds Prepared by method SW846 3510C													
117-84-0	Di-n-octyl phthalate	< 5.10		µg/l	5.10	0.796	1	SW846 8270D	29-Apr-14	30-Apr-14	MSL	1409280	
206-44-0	Fluoranthene	< 5.10		µg/l	5.10	0.980	1	"	"	"	"	"	
86-73-7	Fluorene	< 5.10		µg/l	5.10	0.918	1	"	"	"	"	"	
118-74-1	Hexachlorobenzene	< 5.10		µg/l	5.10	0.949	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 5.10		µg/l	5.10	0.847	1	"	"	"	"	"	
77-47-4	Hexachlorocyclopentadiene	< 5.10		µg/l	5.10	4.82	1	"	"	"	"	"	
67-72-1	Hexachloroethane	< 5.10		µg/l	5.10	1.03	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	< 5.10		µg/l	5.10	0.939	1	"	"	"	"	"	
78-59-1	Isophorone	< 5.10		µg/l	5.10	0.847	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	< 5.10		µg/l	5.10	0.929	1	"	"	"	"	"	
95-48-7	2-Methylphenol	< 5.10		µg/l	5.10	0.980	1	"	"	"	"	"	
108-39-4, 106-44-5	3 & 4-Methylphenol	< 10.2		µg/l	10.2	0.959	1	"	"	"	"	"	
91-20-3	Naphthalene	< 5.10		µg/l	5.10	0.908	1	"	"	"	"	"	
88-74-4	2-Nitroaniline	< 5.10		µg/l	5.10	0.837	1	"	"	"	"	"	
99-09-2	3-Nitroaniline	< 5.10		µg/l	5.10	0.653	1	"	"	"	"	"	
100-01-6	4-Nitroaniline	< 20.4		µg/l	20.4	0.735	1	"	"	"	"	"	
98-95-3	Nitrobenzene	< 5.10		µg/l	5.10	0.969	1	"	"	"	"	"	
88-75-5	2-Nitrophenol	< 5.10		µg/l	5.10	1.05	1	"	"	"	"	"	
100-02-7	4-Nitrophenol	< 20.4		µg/l	20.4	2.85	1	"	"	"	"	"	
62-75-9	N-Nitrosodimethylamine	< 5.10		µg/l	5.10	1.03	1	"	"	"	"	"	
621-64-7	N-Nitrosodi-n-propylamine	< 5.10		µg/l	5.10	0.939	1	"	"	"	"	"	
86-30-6	N-Nitrosodiphenylamine	< 5.10		µg/l	5.10	0.980	1	"	"	"	"	"	
87-86-5	Pentachlorophenol	< 20.4		µg/l	20.4	0.827	1	"	"	"	"	"	
85-01-8	Phenanthrene	< 5.10		µg/l	5.10	0.888	1	"	"	"	"	"	
108-95-2	Phenol	< 5.10		µg/l	5.10	0.969	1	"	"	"	"	"	
129-00-0	Pyrene	< 5.10		µg/l	5.10	1.31	1	"	"	"	"	"	
110-86-1	Pyridine	< 5.10		µg/l	5.10	0.990	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 5.10		µg/l	5.10	0.939	1	"	"	"	"	"	
90-12-0	1-Methylnaphthalene	< 5.10		µg/l	5.10	0.949	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 5.10		µg/l	5.10	0.847	1	"	"	"	"	"	
88-06-2	2,4,6-Trichlorophenol	< 5.10		µg/l	5.10	0.796	1	"	"	"	"	"	
82-68-8	Pentachloronitrobenzene	< 5.10		µg/l	5.10	0.929	1	"	"	"	"	"	
95-94-3	1,2,4,5-Tetrachlorobenzene	< 5.10		µg/l	5.10	0.980	1	"	"	"	"	"	
Surrogate recoveries:													
321-60-8	*2-Fluorobiphenyl*	*53*			*30-130 %*			"	"	"	"	"	
367-12-4	*2-Fluorophenol*	*32*			*15-110 %*			"	"	"	"	"	
4165-60-0	*Nitrobenzene-d5*	*59*			*30-130 %*			"	"	"	"	"	
4165-62-2	*Phenol-d5*	*19*			*15-110 %*			"	"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*67*			*30-130 %*			"	"	"	"	"	
118-79-6	*2,4,6-Tribromophenol*	*74*			*15-110 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GC													
Polychlorinated Biphenyls Prepared by method SW846 3510C													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-3	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-03				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GC													
Polychlorinated Biphenyls Prepared by method SW846 3510C													
12674-11-2	Aroclor-1016	< 0.222		µg/l	0.222	0.134	1	SW846 8082A	29-Apr-14	30-Apr-14	IMR	1409281	
11104-28-2	Aroclor-1221	< 0.222		µg/l	0.222	0.170	1	"	"	"	"	"	
11141-16-5	Aroclor-1232	< 0.222		µg/l	0.222	0.149	1	"	"	"	"	"	
53469-21-9	Aroclor-1242	< 0.222		µg/l	0.222	0.130	1	"	"	"	"	"	
12672-29-6	Aroclor-1248	< 0.222		µg/l	0.222	0.109	1	"	"	"	"	"	
11097-69-1	Aroclor-1254	< 0.222		µg/l	0.222	0.137	1	"	"	"	"	"	
11096-82-5	Aroclor-1260	< 0.222		µg/l	0.222	0.137	1	"	"	"	"	"	
37324-23-5	Aroclor-1262	< 0.222		µg/l	0.222	0.122	1	"	"	"	"	"	
11100-14-4	Aroclor-1268	< 0.222		µg/l	0.222	0.103	1	"	"	"	"	"	
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*110*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*110*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*100*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*110*			*30-150 %*			"	"	"	"	"	
Extractable Petroleum Hydrocarbons													
Fingerprinting by GC Prepared by method SW846 3510C													
8006-61-9	Gasoline	< 0.2		mg/l	0.2	0.09	1	SW846 8100Mod.	29-Apr-14	29-Apr-14	SEP	1409279	
68476-30-2	Fuel Oil #2	< 0.2		mg/l	0.2	0.1	1	"	"	"	"	"	
68476-31-3	Fuel Oil #4	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
68553-00-4	Fuel Oil #6	< 0.2		mg/l	0.2	0.1	1	"	"	"	"	"	
M09800000	Motor Oil	< 0.2		mg/l	0.2	0.2	1	"	"	"	"	"	
8032-32-4	Ligroin	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
J00100000	Aviation Fuel	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Hydraulic Oil	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
	Dielectric Fluid	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Unidentified	**0.5**		mg/l	0.2	0.05	1	"	"	"	"	"	
	Other Oil	**Calculated as**		mg/l	0.2	0.02	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	**0.5**		mg/l	0.2	0.02	1	"	"	"	"	"	
Surrogate recoveries:													
3386-33-2	*1-Chlorooctadecane*	*61*			*40-140 %*			"	"	"	"	"	
Total Metals by EPA 200/6000 Series Methods													
	Preservation	**Field Preserved**		N/A			1	EPA 200/6000 methods			BJW	1409204	
Total Metals by EPA 6000/7000 Series Methods													
7440-22-4	Silver	< 0.0050		mg/l	0.0050	0.0011	1	SW846 6010C	30-Apr-14	30-Apr-14	TBC	1409265	
7440-38-2	Arsenic	**0.0042**		mg/l	0.0040	0.0019	1	"	"	"	"	"	
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0012	1	"	"	"	"	"	
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0014	1	"	"	"	"	"	
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0022	1	"	"	"	"	"	
7439-89-6	Iron	**0.408**		mg/l	0.0150	0.0122	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-3 SB88395-03	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Total Metals by EPA 6000/7000 Series Methods													
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0014	1	SW846 6010C	30-Apr-14	30-Apr-14	TBC	1409265	
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0032	1	"	"	"	"	"	
7440-36-0	Antimony	< 0.0060		mg/l	0.0060	0.0022	1	"	"	"	"	"	
7782-49-2	Selenium	< 0.0150		mg/l	0.0150	0.0067	1	"	"	"	"	"	
7440-66-6	Zinc	< 0.0090		mg/l	0.0090	0.0024	1	"	"	"	"	"	
Total Metals by EPA 200 Series Methods													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.00008	1	EPA 245.1/7470A	30-Apr-14	30-Apr-14	LR	1409262	X
General Chemistry Parameters													
16065-83-1	Trivalent Chromium	< 0.0100		mg/l	0.0100	0.0053	1	Calculation	30-Apr-14	30-Apr-14	TBC	1409265	
7782-50-5	Total Residual Chlorine	< 0.020	HT3,ClHT	mg/l	0.020	0.006	1	SM4500-Cl-G	29-Apr-14 10:44	29-Apr-14 15:48	TD/CA	1409336	X
16887-00-6	Chloride	**9.64**		mg/l	1.00	0.295	1	EPA 300.0	29-Apr-14	01-May-14	CAW	1409382	X
18540-29-9	Hexavalent Chromium	< 0.005		mg/l	0.005	0.003	1	SM3500-Cr-B/7196A	28-Apr-14 18:58	28-Apr-14 19:28	TD/CA	1409263	
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00419	1	EPA 335.4 / SW846 9012B	29-Apr-14	30-Apr-14	RLT	1409385	X
	Total Suspended Solids	**8.0**		mg/l	5.0	2.2	1	SM2540D	29-Apr-14	30-Apr-14	CMB	1409299	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
B-304	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-04				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	29-Apr-14	30-Apr-14	NAA	1409321	
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
B-304	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-04				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	29-Apr-14	30-Apr-14	NAA	1409321	
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*93*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*100*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*100*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*100*			*70-130 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds Prepared by method SW846 3510C													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
B-304	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-04				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds Prepared by method SW846 3510C													
83-32-9	Acenaphthene	< 6.02		µg/l	6.02	1.08	1	SW846 8270D	29-Apr-14	30-Apr-14	MSL	1409280	
208-96-8	Acenaphthylene	< 6.02		µg/l	6.02	1.05	1	"	"	"	"	"	
62-53-3	Aniline	< 6.02		µg/l	6.02	0.759	1	"	"	"	"	"	
120-12-7	Anthracene	< 6.02		µg/l	6.02	1.08	1	"	"	"	"	"	
103-33-3	Azobenzene/Diphenyldiazene	< 6.02		µg/l	6.02	0.904	1	"	"	"	"	"	
92-87-5	Benzidine	< 6.02		µg/l	6.02	5.27	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	< 6.02		µg/l	6.02	1.43	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	< 6.02		µg/l	6.02	1.05	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	< 6.02		µg/l	6.02	1.02	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	< 6.02		µg/l	6.02	1.08	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	< 6.02		µg/l	6.02	1.34	1	"	"	"	"	"	
65-85-0	Benzoic acid	< 6.02		µg/l	6.02	2.61	1	"	"	"	"	"	
100-51-6	Benzyl alcohol	< 6.02		µg/l	6.02	1.12	1	"	"	"	"	"	
111-91-1	Bis(2-chloroethoxy)methane	< 6.02		µg/l	6.02	0.843	1	"	"	"	"	"	
111-44-4	Bis(2-chloroethyl)ether	< 6.02		µg/l	6.02	1.01	1	"	"	"	"	"	
108-60-1	Bis(2-chloroisopropyl)ether	< 6.02		µg/l	6.02	1.18	1	"	"	"	"	"	
117-81-7	Bis(2-ethylhexyl)phthalate	< 6.02		µg/l	6.02	1.23	1	"	"	"	"	"	
101-55-3	4-Bromophenyl phenyl ether	< 6.02		µg/l	6.02	1.02	1	"	"	"	"	"	
85-68-7	Butyl benzyl phthalate	< 6.02		µg/l	6.02	1.24	1	"	"	"	"	"	
86-74-8	Carbazole	< 6.02		µg/l	6.02	3.87	1	"	"	"	"	"	
59-50-7	4-Chloro-3-methylphenol	< 6.02		µg/l	6.02	1.14	1	"	"	"	"	"	
106-47-8	4-Chloroaniline	< 6.02		µg/l	6.02	0.675	1	"	"	"	"	"	
91-58-7	2-Chloronaphthalene	< 6.02		µg/l	6.02	1.05	1	"	"	"	"	"	
95-57-8	2-Chlorophenol	< 6.02		µg/l	6.02	1.16	1	"	"	"	"	"	
7005-72-3	4-Chlorophenyl phenyl ether	< 6.02		µg/l	6.02	1.07	1	"	"	"	"	"	
218-01-9	Chrysene	< 6.02		µg/l	6.02	1.37	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	< 6.02		µg/l	6.02	1.12	1	"	"	"	"	"	
132-64-9	Dibenzofuran	< 6.02		µg/l	6.02	1.06	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 6.02		µg/l	6.02	1.18	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 6.02		µg/l	6.02	1.16	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 6.02		µg/l	6.02	1.20	1	"	"	"	"	"	
91-94-1	3,3´-Dichlorobenzidine	< 6.02		µg/l	6.02	0.819	1	"	"	"	"	"	
120-83-2	2,4-Dichlorophenol	< 6.02		µg/l	6.02	0.988	1	"	"	"	"	"	
84-66-2	Diethyl phthalate	< 6.02		µg/l	6.02	1.04	1	"	"	"	"	"	
131-11-3	Dimethyl phthalate	< 6.02		µg/l	6.02	1.10	1	"	"	"	"	"	
105-67-9	2,4-Dimethylphenol	< 6.02		µg/l	6.02	0.976	1	"	"	"	"	"	
84-74-2	Di-n-butyl phthalate	< 6.02		µg/l	6.02	1.13	1	"	"	"	"	"	
534-52-1	4,6-Dinitro-2-methylphenol	< 6.02		µg/l	6.02	0.807	1	"	"	"	"	"	
51-28-5	2,4-Dinitrophenol	< 6.02		µg/l	6.02	3.46	1	"	"	"	"	"	
121-14-2	2,4-Dinitrotoluene	< 6.02		µg/l	6.02	1.13	1	"	"	"	"	"	
606-20-2	2,6-Dinitrotoluene	< 6.02		µg/l	6.02	1.13	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
B-304	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-04				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds Prepared by method SW846 3510C													
117-84-0	Di-n-octyl phthalate	< 6.02		µg/l	6.02	0.940	1	SW846 8270D	29-Apr-14	30-Apr-14	MSL	1409280	
206-44-0	Fluoranthene	< 6.02		µg/l	6.02	1.16	1	"	"	"	"	"	
86-73-7	Fluorene	< 6.02		µg/l	6.02	1.08	1	"	"	"	"	"	
118-74-1	Hexachlorobenzene	< 6.02		µg/l	6.02	1.12	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 6.02		µg/l	6.02	1.00	1	"	"	"	"	"	
77-47-4	Hexachlorocyclopentadiene	< 6.02		µg/l	6.02	5.69	1	"	"	"	"	"	
67-72-1	Hexachloroethane	< 6.02		µg/l	6.02	1.22	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	< 6.02		µg/l	6.02	1.11	1	"	"	"	"	"	
78-59-1	Isophorone	< 6.02		µg/l	6.02	1.00	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	< 6.02		µg/l	6.02	1.10	1	"	"	"	"	"	
95-48-7	2-Methylphenol	< 6.02		µg/l	6.02	1.16	1	"	"	"	"	"	
108-39-4, 106-44-5	3 & 4-Methylphenol	< 12.0		µg/l	12.0	1.13	1	"	"	"	"	"	
91-20-3	Naphthalene	< 6.02		µg/l	6.02	1.07	1	"	"	"	"	"	
88-74-4	2-Nitroaniline	< 6.02		µg/l	6.02	0.988	1	"	"	"	"	"	
99-09-2	3-Nitroaniline	< 6.02		µg/l	6.02	0.771	1	"	"	"	"	"	
100-01-6	4-Nitroaniline	< 24.1		µg/l	24.1	0.867	1	"	"	"	"	"	
98-95-3	Nitrobenzene	< 6.02		µg/l	6.02	1.14	1	"	"	"	"	"	
88-75-5	2-Nitrophenol	< 6.02		µg/l	6.02	1.24	1	"	"	"	"	"	
100-02-7	4-Nitrophenol	< 24.1		µg/l	24.1	3.36	1	"	"	"	"	"	
62-75-9	N-Nitrosodimethylamine	< 6.02		µg/l	6.02	1.22	1	"	"	"	"	"	
621-64-7	N-Nitrosodi-n-propylamine	< 6.02		µg/l	6.02	1.11	1	"	"	"	"	"	
86-30-6	N-Nitrosodiphenylamine	< 6.02		µg/l	6.02	1.16	1	"	"	"	"	"	
87-86-5	Pentachlorophenol	< 24.1		µg/l	24.1	0.976	1	"	"	"	"	"	
85-01-8	Phenanthrene	< 6.02		µg/l	6.02	1.05	1	"	"	"	"	"	
108-95-2	Phenol	< 6.02		µg/l	6.02	1.14	1	"	"	"	"	"	
129-00-0	Pyrene	< 6.02		µg/l	6.02	1.54	1	"	"	"	"	"	
110-86-1	Pyridine	< 6.02		µg/l	6.02	1.17	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 6.02		µg/l	6.02	1.11	1	"	"	"	"	"	
90-12-0	1-Methylnaphthalene	< 6.02		µg/l	6.02	1.12	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 6.02		µg/l	6.02	1.00	1	"	"	"	"	"	
88-06-2	2,4,6-Trichlorophenol	< 6.02		µg/l	6.02	0.940	1	"	"	"	"	"	
82-68-8	Pentachloronitrobenzene	< 6.02		µg/l	6.02	1.10	1	"	"	"	"	"	
95-94-3	1,2,4,5-Tetrachlorobenzene	< 6.02		µg/l	6.02	1.16	1	"	"	"	"	"	
Surrogate recoveries:													
321-60-8	*2-Fluorobiphenyl*	*59*			*30-130 %*			"	"	"	"	"	
367-12-4	*2-Fluorophenol*	*36*			*15-110 %*			"	"	"	"	"	
4165-60-0	*Nitrobenzene-d5*	*68*			*30-130 %*			"	"	"	"	"	
4165-62-2	*Phenol-d5*	*21*			*15-110 %*			"	"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*80*			*30-130 %*			"	"	"	"	"	
118-79-6	*2,4,6-Tribromophenol*	*85*			*15-110 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GC													
Polychlorinated Biphenyls Prepared by method SW846 3510C													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
B-304	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-04				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GC													
Polychlorinated Biphenyls Prepared by method SW846 3510C													
12674-11-2	Aroclor-1016	< 0.235		µg/l	0.235	0.142	1	SW846 8082A	29-Apr-14	30-Apr-14	IMR	1409281	
11104-28-2	Aroclor-1221	< 0.235		µg/l	0.235	0.180	1	"	"	"	"	"	
11141-16-5	Aroclor-1232	< 0.235		µg/l	0.235	0.158	1	"	"	"	"	"	
53469-21-9	Aroclor-1242	< 0.235		µg/l	0.235	0.138	1	"	"	"	"	"	
12672-29-6	Aroclor-1248	< 0.235		µg/l	0.235	0.115	1	"	"	"	"	"	
11097-69-1	Aroclor-1254	< 0.235		µg/l	0.235	0.145	1	"	"	"	"	"	
11096-82-5	Aroclor-1260	< 0.235		µg/l	0.235	0.145	1	"	"	"	"	"	
37324-23-5	Aroclor-1262	< 0.235		µg/l	0.235	0.129	1	"	"	"	"	"	
11100-14-4	Aroclor-1268	< 0.235		µg/l	0.235	0.109	1	"	"	"	"	"	
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*125*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*130*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*115*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*130*			*30-150 %*			"	"	"	"	"	
Extractable Petroleum Hydrocarbons													
Fingerprinting by GC Prepared by method SW846 3510C													
8006-61-9	Gasoline	< 0.2		mg/l	0.2	0.1	1	SW846 8100Mod.	29-Apr-14	30-Apr-14	SEP	1409279	
68476-30-2	Fuel Oil #2	< 0.2		mg/l	0.2	0.1	1	"	"	"	"	"	
68476-31-3	Fuel Oil #4	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
68553-00-4	Fuel Oil #6	< 0.2		mg/l	0.2	0.2	1	"	"	"	"	"	
M09800000	Motor Oil	< 0.2		mg/l	0.2	0.2	1	"	"	"	"	"	
8032-32-4	Ligroin	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
J00100000	Aviation Fuel	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Hydraulic Oil	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
	Dielectric Fluid	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Unidentified	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Other Oil	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
Surrogate recoveries:													
3386-33-2	*1-Chlorooctadecane*	*60*			*40-140 %*			"	"	"	"	"	
Total Metals by EPA 200/6000 Series Methods													
	Preservation	**Field Preserved**		N/A			1	EPA 200/6000 methods			BJW	1409204	
Total Metals by EPA 6000/7000 Series Methods													
7440-22-4	Silver	< 0.0050		mg/l	0.0050	0.0011	1	SW846 6010C	30-Apr-14	30-Apr-14	TBC	1409265	
7440-38-2	Arsenic	**0.0858**		mg/l	0.0040	0.0019	1	"	"	"	"	"	
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0012	1	"	"	"	"	"	
7440-47-3	Chromium	**0.0739**		mg/l	0.0050	0.0014	1	"	"	"	"	"	
7440-50-8	Copper	**0.0567**		mg/l	0.0050	0.0022	1	"	"	"	"	"	
7439-89-6	Iron	**49.9**		mg/l	0.0150	0.0122	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
B-304	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-04				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Total Metals by EPA 6000/7000 Series Methods													
7440-02-0	Nickel	**0.0780**		mg/l	0.0050	0.0014	1	SW846 6010C	30-Apr-14	30-Apr-14	TBC	1409265	
7439-92-1	Lead	**0.0302**		mg/l	0.0075	0.0032	1	"	"	"	"	"	
7440-36-0	Antimony	< 0.0060		mg/l	0.0060	0.0022	1	"	"	"	"	"	
7782-49-2	Selenium	< 0.0150		mg/l	0.0150	0.0067	1	"	"	"	"	"	
7440-66-6	Zinc	**0.140**		mg/l	0.0090	0.0024	1	"	"	"	"	"	
Total Metals by EPA 200 Series Methods													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.00008	1	EPA 245.1/7470A	30-Apr-14	30-Apr-14	LR	1409262	X
General Chemistry Parameters													
16065-83-1	Trivalent Chromium	**0.0739**	R01	mg/l	0.0500	0.0053	1	Calculation	30-Apr-14	30-Apr-14	TBC	1409265	
7782-50-5	Total Residual Chlorine	< 0.100	HT3,ClHT	mg/l	0.100	0.028	1	SM4500-Cl-G	29-Apr-14 10:44	29-Apr-14 15:55	TD/CA	1409336	X
16887-00-6	Chloride	**383**	D, GS1	mg/l	15.0	4.42	15	EPA 300.0	29-Apr-14	01-May-14	CAW	1409382	X
18540-29-9	Hexavalent Chromium	< 0.050	R01,LIV	mg/l	0.050	0.033	1	SM3500-Cr-B/7196A	28-Apr-14 18:58	28-Apr-14 19:30	TD/CA	1409263	
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00419	1	EPA 335.4 / SW846 9012B	29-Apr-14	30-Apr-14	RLT	1409385	X
	Total Suspended Solids	**5,100**	LIV	mg/l	20.0	8.6	1	SM2540D	29-Apr-14	30-Apr-14	CMB	1409299	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
B-310	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-05				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	29-Apr-14	30-Apr-14	NAA	1409321	
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
B-310	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-05				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	29-Apr-14	30-Apr-14	NAA	1409321	
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*97*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*99*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*102*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*101*			*70-130 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds Prepared by method SW846 3510C													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
B-310	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-05				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds Prepared by method SW846 3510C													
83-32-9	Acenaphthene	< 5.95		µg/l	5.95	1.07	1	SW846 8270D	29-Apr-14	30-Apr-14	MSL	1409280	
208-96-8	Acenaphthylene	< 5.95		µg/l	5.95	1.04	1	"	"	"	"	"	
62-53-3	Aniline	< 5.95		µg/l	5.95	0.750	1	"	"	"	"	"	
120-12-7	Anthracene	< 5.95		µg/l	5.95	1.07	1	"	"	"	"	"	
103-33-3	Azobenzene/Diphenyldiazene	< 5.95		µg/l	5.95	0.893	1	"	"	"	"	"	
92-87-5	Benzidine	< 5.95		µg/l	5.95	5.20	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	< 5.95		µg/l	5.95	1.42	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	< 5.95		µg/l	5.95	1.04	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	< 5.95		µg/l	5.95	1.01	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	< 5.95		µg/l	5.95	1.07	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	< 5.95		µg/l	5.95	1.32	1	"	"	"	"	"	
65-85-0	Benzoic acid	< 5.95		µg/l	5.95	2.58	1	"	"	"	"	"	
100-51-6	Benzyl alcohol	< 5.95		µg/l	5.95	1.11	1	"	"	"	"	"	
111-91-1	Bis(2-chloroethoxy)methane	< 5.95		µg/l	5.95	0.833	1	"	"	"	"	"	
111-44-4	Bis(2-chloroethyl)ether	< 5.95		µg/l	5.95	1.00	1	"	"	"	"	"	
108-60-1	Bis(2-chloroisopropyl)ether	< 5.95		µg/l	5.95	1.17	1	"	"	"	"	"	
117-81-7	Bis(2-ethylhexyl)phthalate	< 5.95		µg/l	5.95	1.21	1	"	"	"	"	"	
101-55-3	4-Bromophenyl phenyl ether	< 5.95		µg/l	5.95	1.01	1	"	"	"	"	"	
85-68-7	Butyl benzyl phthalate	< 5.95		µg/l	5.95	1.23	1	"	"	"	"	"	
86-74-8	Carbazole	< 5.95		µg/l	5.95	3.82	1	"	"	"	"	"	
59-50-7	4-Chloro-3-methylphenol	< 5.95		µg/l	5.95	1.13	1	"	"	"	"	"	
106-47-8	4-Chloroaniline	< 5.95		µg/l	5.95	0.667	1	"	"	"	"	"	
91-58-7	2-Chloronaphthalene	< 5.95		µg/l	5.95	1.04	1	"	"	"	"	"	
95-57-8	2-Chlorophenol	< 5.95		µg/l	5.95	1.14	1	"	"	"	"	"	
7005-72-3	4-Chlorophenyl phenyl ether	< 5.95		µg/l	5.95	1.06	1	"	"	"	"	"	
218-01-9	Chrysene	< 5.95		µg/l	5.95	1.36	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	< 5.95		µg/l	5.95	1.11	1	"	"	"	"	"	
132-64-9	Dibenzofuran	< 5.95		µg/l	5.95	1.05	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5.95		µg/l	5.95	1.17	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5.95		µg/l	5.95	1.14	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5.95		µg/l	5.95	1.19	1	"	"	"	"	"	
91-94-1	3,3´-Dichlorobenzidine	< 5.95		µg/l	5.95	0.810	1	"	"	"	"	"	
120-83-2	2,4-Dichlorophenol	< 5.95		µg/l	5.95	0.976	1	"	"	"	"	"	
84-66-2	Diethyl phthalate	< 5.95		µg/l	5.95	1.02	1	"	"	"	"	"	
131-11-3	Dimethyl phthalate	< 5.95		µg/l	5.95	1.08	1	"	"	"	"	"	
105-67-9	2,4-Dimethylphenol	< 5.95		µg/l	5.95	0.964	1	"	"	"	"	"	
84-74-2	Di-n-butyl phthalate	< 5.95		µg/l	5.95	1.12	1	"	"	"	"	"	
534-52-1	4,6-Dinitro-2-methylphenol	< 5.95		µg/l	5.95	0.798	1	"	"	"	"	"	
51-28-5	2,4-Dinitrophenol	< 5.95		µg/l	5.95	3.42	1	"	"	"	"	"	
121-14-2	2,4-Dinitrotoluene	< 5.95		µg/l	5.95	1.12	1	"	"	"	"	"	
606-20-2	2,6-Dinitrotoluene	< 5.95		µg/l	5.95	1.12	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
B-310	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-05				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds Prepared by method SW846 3510C													
117-84-0	Di-n-octyl phthalate	< 5.95		µg/l	5.95	0.929	1	SW846 8270D	29-Apr-14	30-Apr-14	MSL	1409280	
206-44-0	Fluoranthene	< 5.95		µg/l	5.95	1.14	1	"	"	"	"	"	
86-73-7	Fluorene	< 5.95		µg/l	5.95	1.07	1	"	"	"	"	"	
118-74-1	Hexachlorobenzene	< 5.95		µg/l	5.95	1.11	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 5.95		µg/l	5.95	0.988	1	"	"	"	"	"	
77-47-4	Hexachlorocyclopentadiene	< 5.95		µg/l	5.95	5.62	1	"	"	"	"	"	
67-72-1	Hexachloroethane	< 5.95		µg/l	5.95	1.20	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	< 5.95		µg/l	5.95	1.10	1	"	"	"	"	"	
78-59-1	Isophorone	< 5.95		µg/l	5.95	0.988	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	< 5.95		µg/l	5.95	1.08	1	"	"	"	"	"	
95-48-7	2-Methylphenol	< 5.95		µg/l	5.95	1.14	1	"	"	"	"	"	
108-39-4, 106-44-5	3 & 4-Methylphenol	< 11.9		µg/l	11.9	1.12	1	"	"	"	"	"	
91-20-3	Naphthalene	< 5.95		µg/l	5.95	1.06	1	"	"	"	"	"	
88-74-4	2-Nitroaniline	< 5.95		µg/l	5.95	0.976	1	"	"	"	"	"	
99-09-2	3-Nitroaniline	< 5.95		µg/l	5.95	0.762	1	"	"	"	"	"	
100-01-6	4-Nitroaniline	< 23.8		µg/l	23.8	0.857	1	"	"	"	"	"	
98-95-3	Nitrobenzene	< 5.95		µg/l	5.95	1.13	1	"	"	"	"	"	
88-75-5	2-Nitrophenol	< 5.95		µg/l	5.95	1.23	1	"	"	"	"	"	
100-02-7	4-Nitrophenol	< 23.8		µg/l	23.8	3.32	1	"	"	"	"	"	
62-75-9	N-Nitrosodimethylamine	< 5.95		µg/l	5.95	1.20	1	"	"	"	"	"	
621-64-7	N-Nitrosodi-n-propylamine	< 5.95		µg/l	5.95	1.10	1	"	"	"	"	"	
86-30-6	N-Nitrosodiphenylamine	< 5.95		µg/l	5.95	1.14	1	"	"	"	"	"	
87-86-5	Pentachlorophenol	< 23.8		µg/l	23.8	0.964	1	"	"	"	"	"	
85-01-8	Phenanthrene	< 5.95		µg/l	5.95	1.04	1	"	"	"	"	"	
108-95-2	Phenol	< 5.95		µg/l	5.95	1.13	1	"	"	"	"	"	
129-00-0	Pyrene	< 5.95		µg/l	5.95	1.52	1	"	"	"	"	"	
110-86-1	Pyridine	< 5.95		µg/l	5.95	1.15	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 5.95		µg/l	5.95	1.10	1	"	"	"	"	"	
90-12-0	1-Methylnaphthalene	< 5.95		µg/l	5.95	1.11	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 5.95		µg/l	5.95	0.988	1	"	"	"	"	"	
88-06-2	2,4,6-Trichlorophenol	< 5.95		µg/l	5.95	0.929	1	"	"	"	"	"	
82-68-8	Pentachloronitrobenzene	< 5.95		µg/l	5.95	1.08	1	"	"	"	"	"	
95-94-3	1,2,4,5-Tetrachlorobenzene	< 5.95		µg/l	5.95	1.14	1	"	"	"	"	"	
Surrogate recoveries:													
321-60-8	*2-Fluorobiphenyl*	*58*			*30-130 %*			"	"	"	"	"	
367-12-4	*2-Fluorophenol*	*36*			*15-110 %*			"	"	"	"	"	
4165-60-0	*Nitrobenzene-d5*	*67*			*30-130 %*			"	"	"	"	"	
4165-62-2	*Phenol-d5*	*21*			*15-110 %*			"	"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*83*			*30-130 %*			"	"	"	"	"	
118-79-6	*2,4,6-Tribromophenol*	*79*			*15-110 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GC													
Polychlorinated Biphenyls Prepared by method SW846 3510C													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
B-310	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14
SB88395-05				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GC													
Polychlorinated Biphenyls Prepared by method SW846 3510C													
12674-11-2	Aroclor-1016	< 0.208		µg/l	0.208	0.126	1	SW846 8082A	29-Apr-14	30-Apr-14	IMR	1409281	
11104-28-2	Aroclor-1221	< 0.208		µg/l	0.208	0.159	1	"	"	"	"	"	
11141-16-5	Aroclor-1232	< 0.208		µg/l	0.208	0.140	1	"	"	"	"	"	
53469-21-9	Aroclor-1242	< 0.208		µg/l	0.208	0.122	1	"	"	"	"	"	
12672-29-6	Aroclor-1248	< 0.208		µg/l	0.208	0.102	1	"	"	"	"	"	
11097-69-1	Aroclor-1254	< 0.208		µg/l	0.208	0.128	1	"	"	"	"	"	
11096-82-5	Aroclor-1260	< 0.208		µg/l	0.208	0.128	1	"	"	"	"	"	
37324-23-5	Aroclor-1262	< 0.208		µg/l	0.208	0.115	1	"	"	"	"	"	
11100-14-4	Aroclor-1268	< 0.208		µg/l	0.208	0.0969	1	"	"	"	"	"	
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*130*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*115*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*140*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*140*			*30-150 %*			"	"	"	"	"	
Extractable Petroleum Hydrocarbons													
Fingerprinting by GC Prepared by method SW846 3510C													
8006-61-9	Gasoline	< 0.2		mg/l	0.2	0.1	1	SW846 8100Mod.	29-Apr-14	30-Apr-14	SEP	1409279	
68476-30-2	Fuel Oil #2	< 0.2		mg/l	0.2	0.1	1	"	"	"	"	"	
68476-31-3	Fuel Oil #4	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
68553-00-4	Fuel Oil #6	< 0.2		mg/l	0.2	0.2	1	"	"	"	"	"	
M09800000	Motor Oil	< 0.2		mg/l	0.2	0.2	1	"	"	"	"	"	
8032-32-4	Ligroin	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
J00100000	Aviation Fuel	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Hydraulic Oil	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
	Dielectric Fluid	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Unidentified	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Other Oil	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
Surrogate recoveries:													
3386-33-2	*1-Chlorooctadecane*	*54*			*40-140 %*			"	"	"	"	"	
Total Metals by EPA 200/6000 Series Methods													
	Preservation	**Field Preserved**		N/A			1	EPA 200/6000 methods			BJW	1409204	
Total Metals by EPA 6000/7000 Series Methods													
7440-22-4	Silver	< 0.0050		mg/l	0.0050	0.0011	1	SW846 6010C	30-Apr-14	30-Apr-14	TBC	1409265	
7440-38-2	Arsenic	**0.0046**		mg/l	0.0040	0.0019	1	"	"	"	"	"	
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0012	1	"	"	"	"	"	
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0014	1	"	"	"	"	"	
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0022	1	"	"	"	"	"	
7439-89-6	Iron	**1.07**		mg/l	0.0150	0.0122	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
B-310 SB88395-05	03-218836	Ground Water	28-Apr-14 00:00	28-Apr-14

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Total Metals by EPA 6000/7000 Series Methods													
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0014	1	SW846 6010C	30-Apr-14	30-Apr-14	TBC	1409265	
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0032	1	"	"	"	"	"	
7440-36-0	Antimony	< 0.0060		mg/l	0.0060	0.0022	1	"	"	"	"	"	
7782-49-2	Selenium	< 0.0150		mg/l	0.0150	0.0067	1	"	"	"	"	"	
7440-66-6	Zinc	< 0.0090		mg/l	0.0090	0.0024	1	"	"	"	"	"	
Total Metals by EPA 200 Series Methods													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.00008	1	EPA 245.1/7470A	30-Apr-14	30-Apr-14	LR	1409262	X
General Chemistry Parameters													
16065-83-1	Trivalent Chromium	< 0.0100		mg/l	0.0100	0.0053	1	Calculation	30-Apr-14	30-Apr-14	TBC	1409265	
7782-50-5	Total Residual Chlorine	< 0.020	HT3,ClHT	mg/l	0.020	0.006	1	SM4500-Cl-G	29-Apr-14 10:44	29-Apr-14 15:57	TD/CA	1409336	X
16887-00-6	Chloride	**3.15**		mg/l	1.00	0.295	1	EPA 300.0	29-Apr-14	01-May-14	CAW	1409382	X
18540-29-9	Hexavalent Chromium	< 0.005		mg/l	0.005	0.003	1	SM3500-Cr-B/7196A	28-Apr-14 18:58	28-Apr-14 19:30	TD/CA	1409263	
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00419	1	EPA 335.4 / SW846 9012B	29-Apr-14	30-Apr-14	RLT	1409385	X
	Total Suspended Solids	**79.0**		mg/l	5.0	2.2	1	SM2540D	29-Apr-14	30-Apr-14	CMB	1409299	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Trip Blank	03-218836	Aqueous	28-Apr-14 00:00	28-Apr-14
SB88395-06				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	29-Apr-14	30-Apr-14	NAA	1409321	
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Trip Blank	03-218836	Aqueous	28-Apr-14 00:00	28-Apr-14
SB88395-06				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	29-Apr-14	30-Apr-14	NAA	1409321	
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*100*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*101*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*102*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*100*			*70-130 %*			"	"	"	"	"	

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1409321 - SW846 5030 Water MS										
Blank (1409321-BLK1)					Prepared & Analyzed: 29-Apr-14					
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00						
Acetone	< 10.0		µg/l	10.0						
Acrylonitrile	< 0.50		µg/l	0.50						
Benzene	< 1.00		µg/l	1.00						
Bromobenzene	< 1.00		µg/l	1.00						
Bromochloromethane	< 1.00		µg/l	1.00						
Bromodichloromethane	< 0.50		µg/l	0.50						
Bromoform	< 1.00		µg/l	1.00						
Bromomethane	< 2.00		µg/l	2.00						
2-Butanone (MEK)	< 10.0		µg/l	10.0						
n-Butylbenzene	< 1.00		µg/l	1.00						
sec-Butylbenzene	< 1.00		µg/l	1.00						
tert-Butylbenzene	< 1.00		µg/l	1.00						
Carbon disulfide	< 2.00		µg/l	2.00						
Carbon tetrachloride	< 1.00		µg/l	1.00						
Chlorobenzene	< 1.00		µg/l	1.00						
Chloroethane	< 2.00		µg/l	2.00						
Chloroform	< 1.00		µg/l	1.00						
Chloromethane	< 2.00		µg/l	2.00						
2-Chlorotoluene	< 1.00		µg/l	1.00						
4-Chlorotoluene	< 1.00		µg/l	1.00						
1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00						
Dibromochloromethane	< 0.50		µg/l	0.50						
1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50						
Dibromomethane	< 1.00		µg/l	1.00						
1,2-Dichlorobenzene	< 1.00		µg/l	1.00						
1,3-Dichlorobenzene	< 1.00		µg/l	1.00						
1,4-Dichlorobenzene	< 1.00		µg/l	1.00						
Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00						
1,1-Dichloroethane	< 1.00		µg/l	1.00						
1,2-Dichloroethane	< 1.00		µg/l	1.00						
1,1-Dichloroethene	< 1.00		µg/l	1.00						
cis-1,2-Dichloroethene	< 1.00		µg/l	1.00						
trans-1,2-Dichloroethene	< 1.00		µg/l	1.00						
1,2-Dichloropropane	< 1.00		µg/l	1.00						
1,3-Dichloropropane	< 1.00		µg/l	1.00						
2,2-Dichloropropane	< 1.00		µg/l	1.00						
1,1-Dichloropropene	< 1.00		µg/l	1.00						
cis-1,3-Dichloropropene	< 0.50		µg/l	0.50						
trans-1,3-Dichloropropene	< 0.50		µg/l	0.50						
Ethylbenzene	< 1.00		µg/l	1.00						
Hexachlorobutadiene	< 0.50		µg/l	0.50						
2-Hexanone (MBK)	< 10.0		µg/l	10.0						
Isopropylbenzene	< 1.00		µg/l	1.00						
4-Isopropyltoluene	< 1.00		µg/l	1.00						
Methyl tert-butyl ether	< 1.00		µg/l	1.00						
4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0						
Methylene chloride	< 2.00		µg/l	2.00						
Naphthalene	< 1.00		µg/l	1.00						
n-Propylbenzene	< 1.00		µg/l	1.00						
Styrene	< 1.00		µg/l	1.00						
1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1409321 - SW846 5030 Water MS										
Blank (1409321-BLK1)					Prepared & Analyzed: 29-Apr-14					
1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50						
Tetrachloroethene	< 1.00		µg/l	1.00						
Toluene	< 1.00		µg/l	1.00						
1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00						
1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00						
1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00						
1,1,1-Trichloroethane	< 1.00		µg/l	1.00						
1,1,2-Trichloroethane	< 1.00		µg/l	1.00						
Trichloroethene	< 1.00		µg/l	1.00						
Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00						
1,2,3-Trichloropropane	< 1.00		µg/l	1.00						
1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00						
1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00						
Vinyl chloride	< 1.00		µg/l	1.00						
m,p-Xylene	< 2.00		µg/l	2.00						
o-Xylene	< 1.00		µg/l	1.00						
Tetrahydrofuran	< 2.00		µg/l	2.00						
Ethyl ether	< 1.00		µg/l	1.00						
Tert-amyl methyl ether	**1.18**	QB2	µg/l	1.00						
Ethyl tert-butyl ether	< 1.00		µg/l	1.00						
Di-isopropyl ether	< 1.00		µg/l	1.00						
Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0						
1,4-Dioxane	< 20.0		µg/l	20.0						
trans-1,4-Dichloro-2-butene	< 5.00		µg/l	5.00						
Ethanol	< 400		µg/l	400						
Surrogate: 4-Bromofluorobenzene	*49.9*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: Toluene-d8	*50.5*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*52.6*		µg/l		*50.0*		*105*	*70-130*		
Surrogate: Dibromofluoromethane	*51.5*		µg/l		*50.0*		*103*	*70-130*		
LCS (1409321-BS1)					Prepared: 29-Apr-14 Analyzed: 30-Apr-14					
1,1,2-Trichlorotrifluoroethane (Freon 113)	**19.3**		µg/l		20.0		96	70-130		
Acetone	**28.1**		µg/l		20.0		141	70-130		
Acrylonitrile	**19.6**		µg/l		20.0		98	70-130		
Benzene	**18.9**		µg/l		20.0		95	70-130		
Bromobenzene	**21.0**		µg/l		20.0		105	70-130		
Bromochloromethane	**19.2**		µg/l		20.0		96	70-130		
Bromodichloromethane	**19.1**		µg/l		20.0		95	70-130		
Bromoform	**21.7**		µg/l		20.0		109	70-130		
Bromomethane	**17.8**		µg/l		20.0		89	70-130		
2-Butanone (MEK)	**24.6**		µg/l		20.0		123	70-130		
n-Butylbenzene	**20.6**		µg/l		20.0		103	70-130		
sec-Butylbenzene	**20.3**		µg/l		20.0		102	70-130		
tert-Butylbenzene	**19.2**		µg/l		20.0		96	70-130		
Carbon disulfide	**19.9**		µg/l		20.0		100	70-130		
Carbon tetrachloride	**18.6**		µg/l		20.0		93	70-130		
Chlorobenzene	**19.1**		µg/l		20.0		96	70-130		
Chloroethane	**19.6**		µg/l		20.0		98	70-130		
Chloroform	**18.9**		µg/l		20.0		95	70-130		
Chloromethane	**22.4**		µg/l		20.0		112	70-130		
2-Chlorotoluene	**19.6**		µg/l		20.0		98	70-130		
4-Chlorotoluene	**18.6**		µg/l		20.0		93	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1409321 - SW846 5030 Water MS										
LCS (1409321-BS1)					Prepared: 29-Apr-14 Analyzed: 30-Apr-14					
1,2-Dibromo-3-chloropropane	**22.0**		µg/l		20.0		110	70-130		
Dibromochloromethane	**21.4**		µg/l		20.0		107	70-130		
1,2-Dibromoethane (EDB)	**21.7**		µg/l		20.0		108	70-130		
Dibromomethane	**20.3**		µg/l		20.0		102	70-130		
1,2-Dichlorobenzene	**20.6**		µg/l		20.0		103	70-130		
1,3-Dichlorobenzene	**20.6**		µg/l		20.0		103	70-130		
1,4-Dichlorobenzene	**18.5**		µg/l		20.0		92	70-130		
Dichlorodifluoromethane (Freon12)	**20.0**		µg/l		20.0		100	70-130		
1,1-Dichloroethane	**20.1**		µg/l		20.0		100	70-130		
1,2-Dichloroethane	**19.4**		µg/l		20.0		97	70-130		
1,1-Dichloroethene	**18.7**		µg/l		20.0		94	70-130		
cis-1,2-Dichloroethene	**19.2**		µg/l		20.0		96	70-130		
trans-1,2-Dichloroethene	**19.2**		µg/l		20.0		96	70-130		
1,2-Dichloropropane	**21.1**		µg/l		20.0		106	70-130		
1,3-Dichloropropane	**21.1**		µg/l		20.0		106	70-130		
2,2-Dichloropropane	**20.4**		µg/l		20.0		102	70-130		
1,1-Dichloropropene	**18.9**		µg/l		20.0		94	70-130		
cis-1,3-Dichloropropene	**19.2**		µg/l		20.0		96	70-130		
trans-1,3-Dichloropropene	**20.8**		µg/l		20.0		104	70-130		
Ethylbenzene	**19.8**		µg/l		20.0		99	70-130		
Hexachlorobutadiene	**21.3**		µg/l		20.0		106	70-130		
2-Hexanone (MBK)	**22.9**		µg/l		20.0		114	70-130		
Isopropylbenzene	**19.9**		µg/l		20.0		100	70-130		
4-Isopropyltoluene	**19.4**		µg/l		20.0		97	70-130		
Methyl tert-butyl ether	**20.0**		µg/l		20.0		100	70-130		
4-Methyl-2-pentanone (MIBK)	**16.4**		µg/l		20.0		82	70-130		
Methylene chloride	**19.4**		µg/l		20.0		97	70-130		
Naphthalene	**21.7**		µg/l		20.0		109	70-130		
n-Propylbenzene	**20.0**		µg/l		20.0		100	70-130		
Styrene	**20.4**		µg/l		20.0		102	70-130		
1,1,1,2-Tetrachloroethane	**20.3**		µg/l		20.0		101	70-130		
1,1,2,2-Tetrachloroethane	**21.4**		µg/l		20.0		107	70-130		
Tetrachloroethene	**19.4**		µg/l		20.0		97	70-130		
Toluene	**20.0**		µg/l		20.0		100	70-130		
1,2,3-Trichlorobenzene	**20.2**		µg/l		20.0		101	70-130		
1,2,4-Trichlorobenzene	**19.2**		µg/l		20.0		96	70-130		
1,3,5-Trichlorobenzene	**19.4**		µg/l		20.0		97	70-130		
1,1,1-Trichloroethane	**20.0**		µg/l		20.0		100	70-130		
1,1,2-Trichloroethane	**21.1**		µg/l		20.0		105	70-130		
Trichloroethene	**18.6**		µg/l		20.0		93	70-130		
Trichlorofluoromethane (Freon 11)	**19.4**		µg/l		20.0		97	70-130		
1,2,3-Trichloropropane	**22.8**		µg/l		20.0		114	70-130		
1,2,4-Trimethylbenzene	**21.0**		µg/l		20.0		105	70-130		
1,3,5-Trimethylbenzene	**20.4**		µg/l		20.0		102	70-130		
Vinyl chloride	**18.9**		µg/l		20.0		94	70-130		
m,p-Xylene	**20.2**		µg/l		20.0		101	70-130		
o-Xylene	**18.6**		µg/l		20.0		93	70-130		
Tetrahydrofuran	**19.2**		µg/l		20.0		96	70-130		
Ethyl ether	**20.7**		µg/l		20.0		103	70-130		
Tert-amyl methyl ether	**20.1**	B	µg/l		20.0		100	70-130		
Ethyl tert-butyl ether	**19.5**		µg/l		20.0		98	70-130		
Di-isopropyl ether	**18.4**		µg/l		20.0		92	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1409321 - SW846 5030 Water MS										
LCS (1409321-BS1)						Prepared: 29-Apr-14 Analyzed: 30-Apr-14				
Tert-Butanol / butyl alcohol	**219**		µg/l		200		110	70-130		
1,4-Dioxane	**205**		µg/l		200		102	70-130		
trans-1,4-Dichloro-2-butene	**22.6**		µg/l		20.0		113	70-130		
Ethanol	**413**		µg/l		400		103	70-130		
Surrogate: 4-Bromofluorobenzene	*52.4*		µg/l		*50.0*		*105*	*70-130*		
Surrogate: Toluene-d8	*51.2*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*49.9*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*50.8*		µg/l		*50.0*		*102*	*70-130*		
LCS Dup (1409321-BSD1)						Prepared: 29-Apr-14 Analyzed: 30-Apr-14				
1,1,2-Trichlorotrifluoroethane (Freon 113)	**20.4**		µg/l		20.0		102	70-130	5	20
Acetone	**19.5**	QR5	µg/l		20.0		97	70-130	36	20
Acrylonitrile	**19.5**		µg/l		20.0		98	70-130	0.5	20
Benzene	**19.8**		µg/l		20.0		99	70-130	5	20
Bromobenzene	**21.8**		µg/l		20.0		109	70-130	4	20
Bromochloromethane	**19.7**		µg/l		20.0		99	70-130	3	20
Bromodichloromethane	**19.9**		µg/l		20.0		100	70-130	4	20
Bromoform	**21.9**		µg/l		20.0		110	70-130	1	20
Bromomethane	**18.3**		µg/l		20.0		91	70-130	3	20
2-Butanone (MEK)	**18.1**	QR5	µg/l		20.0		90	70-130	31	20
n-Butylbenzene	**22.8**		µg/l		20.0		114	70-130	10	20
sec-Butylbenzene	**20.9**		µg/l		20.0		104	70-130	3	20
tert-Butylbenzene	**20.4**		µg/l		20.0		102	70-130	6	20
Carbon disulfide	**21.1**		µg/l		20.0		105	70-130	6	20
Carbon tetrachloride	**20.2**		µg/l		20.0		101	70-130	9	20
Chlorobenzene	**19.6**		µg/l		20.0		98	70-130	3	20
Chloroethane	**20.4**		µg/l		20.0		102	70-130	4	20
Chloroform	**19.2**		µg/l		20.0		96	70-130	1	20
Chloromethane	**23.6**		µg/l		20.0		118	70-130	5	20
2-Chlorotoluene	**20.2**		µg/l		20.0		101	70-130	3	20
4-Chlorotoluene	**19.5**		µg/l		20.0		97	70-130	5	20
1,2-Dibromo-3-chloropropane	**20.6**		µg/l		20.0		103	70-130	7	20
Dibromochloromethane	**22.1**		µg/l		20.0		110	70-130	3	20
1,2-Dibromoethane (EDB)	**21.8**		µg/l		20.0		109	70-130	0.8	20
Dibromomethane	**20.4**		µg/l		20.0		102	70-130	0.3	20
1,2-Dichlorobenzene	**21.6**		µg/l		20.0		108	70-130	5	20
1,3-Dichlorobenzene	**21.3**		µg/l		20.0		106	70-130	3	20
1,4-Dichlorobenzene	**19.4**		µg/l		20.0		97	70-130	5	20
Dichlorodifluoromethane (Freon12)	**21.7**		µg/l		20.0		109	70-130	8	20
1,1-Dichloroethane	**21.4**		µg/l		20.0		107	70-130	6	20
1,2-Dichloroethane	**19.2**		µg/l		20.0		96	70-130	0.6	20
1,1-Dichloroethene	**19.8**		µg/l		20.0		99	70-130	5	20
cis-1,2-Dichloroethene	**19.9**		µg/l		20.0		100	70-130	4	20
trans-1,2-Dichloroethene	**20.1**		µg/l		20.0		101	70-130	5	20
1,2-Dichloropropane	**21.1**		µg/l		20.0		106	70-130	0.1	20
1,3-Dichloropropane	**21.4**		µg/l		20.0		107	70-130	1	20
2,2-Dichloropropane	**20.6**		µg/l		20.0		103	70-130	0.6	20
1,1-Dichloropropene	**20.0**		µg/l		20.0		100	70-130	6	20
cis-1,3-Dichloropropene	**20.5**		µg/l		20.0		102	70-130	6	20
trans-1,3-Dichloropropene	**21.0**		µg/l		20.0		105	70-130	1	20
Ethylbenzene	**21.0**		µg/l		20.0		105	70-130	6	20
Hexachlorobutadiene	**23.2**		µg/l		20.0		116	70-130	9	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1409321 - SW846 5030 Water MS										
LCS Dup (1409321-BSD1)					Prepared: 29-Apr-14 Analyzed: 30-Apr-14					
2-Hexanone (MBK)	**18.9**		µg/l		20.0		94	70-130	19	20
Isopropylbenzene	**20.9**		µg/l		20.0		104	70-130	5	20
4-Isopropyltoluene	**21.2**		µg/l		20.0		106	70-130	9	20
Methyl tert-butyl ether	**19.5**		µg/l		20.0		97	70-130	3	20
4-Methyl-2-pentanone (MIBK)	**16.0**		µg/l		20.0		80	70-130	3	20
Methylene chloride	**20.5**		µg/l		20.0		103	70-130	6	20
Naphthalene	**22.3**		µg/l		20.0		111	70-130	3	20
n-Propylbenzene	**20.0**		µg/l		20.0		100	70-130	0.2	20
Styrene	**20.9**		µg/l		20.0		105	70-130	3	20
1,1,1,2-Tetrachloroethane	**21.3**		µg/l		20.0		106	70-130	5	20
1,1,2,2-Tetrachloroethane	**21.2**		µg/l		20.0		106	70-130	0.8	20
Tetrachloroethene	**20.6**		µg/l		20.0		103	70-130	6	20
Toluene	**21.2**		µg/l		20.0		106	70-130	6	20
1,2,3-Trichlorobenzene	**20.6**		µg/l		20.0		103	70-130	2	20
1,2,4-Trichlorobenzene	**20.4**		µg/l		20.0		102	70-130	6	20
1,3,5-Trichlorobenzene	**21.0**		µg/l		20.0		105	70-130	8	20
1,1,1-Trichloroethane	**21.2**		µg/l		20.0		106	70-130	6	20
1,1,2-Trichloroethane	**21.1**		µg/l		20.0		106	70-130	0.2	20
Trichloroethene	**19.4**		µg/l		20.0		97	70-130	5	20
Trichlorofluoromethane (Freon 11)	**20.4**		µg/l		20.0		102	70-130	5	20
1,2,3-Trichloropropane	**23.0**		µg/l		20.0		115	70-130	0.8	20
1,2,4-Trimethylbenzene	**22.2**		µg/l		20.0		111	70-130	6	20
1,3,5-Trimethylbenzene	**20.8**		µg/l		20.0		104	70-130	2	20
Vinyl chloride	**21.0**		µg/l		20.0		105	70-130	11	20
m,p-Xylene	**21.3**		µg/l		20.0		106	70-130	5	20
o-Xylene	**19.9**		µg/l		20.0		99	70-130	7	20
Tetrahydrofuran	**17.6**		µg/l		20.0		88	70-130	9	20
Ethyl ether	**21.1**		µg/l		20.0		106	70-130	2	20
Tert-amyl methyl ether	**19.9**	B	µg/l		20.0		99	70-130	1	20
Ethyl tert-butyl ether	**19.4**		µg/l		20.0		97	70-130	0.6	20
Di-isopropyl ether	**19.0**		µg/l		20.0		95	70-130	3	20
Tert-Butanol / butyl alcohol	**191**		µg/l		200		96	70-130	14	20
1,4-Dioxane	**141**	QR5	µg/l		200		70	70-130	37	20
trans-1,4-Dichloro-2-butene	**22.0**		µg/l		20.0		110	70-130	3	20
Ethanol	**369**		µg/l		400		92	70-130	11	20
Surrogate: 4-Bromofluorobenzene	*51.9*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*50.8*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*50.1*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: Dibromofluoromethane	*49.6*		µg/l		*50.0*		*99*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1409280 - SW846 3510C										
Blank (1409280-BLK1)					Prepared & Analyzed: 29-Apr-14					
Acenaphthene	< 5.00		µg/l	5.00						
Acenaphthylene	< 5.00		µg/l	5.00						
Aniline	< 5.00		µg/l	5.00						
Anthracene	< 5.00		µg/l	5.00						
Azobenzene/Diphenyldiazene	< 5.00		µg/l	5.00						
Benzidine	< 5.00		µg/l	5.00						
Benzo (a) anthracene	< 5.00		µg/l	5.00						
Benzo (a) pyrene	< 5.00		µg/l	5.00						
Benzo (b) fluoranthene	< 5.00		µg/l	5.00						
Benzo (g,h,i) perylene	< 5.00		µg/l	5.00						
Benzo (k) fluoranthene	< 5.00		µg/l	5.00						
Benzoic acid	< 5.00		µg/l	5.00						
Benzyl alcohol	< 5.00		µg/l	5.00						
Bis(2-chloroethoxy)methane	< 5.00		µg/l	5.00						
Bis(2-chloroethyl)ether	< 5.00		µg/l	5.00						
Bis(2-chloroisopropyl)ether	< 5.00		µg/l	5.00						
Bis(2-ethylhexyl)phthalate	< 5.00		µg/l	5.00						
4-Bromophenyl phenyl ether	< 5.00		µg/l	5.00						
Butyl benzyl phthalate	< 5.00		µg/l	5.00						
Carbazole	< 5.00		µg/l	5.00						
4-Chloro-3-methylphenol	< 5.00		µg/l	5.00						
4-Chloroaniline	< 5.00		µg/l	5.00						
2-Chloronaphthalene	< 5.00		µg/l	5.00						
2-Chlorophenol	< 5.00		µg/l	5.00						
4-Chlorophenyl phenyl ether	< 5.00		µg/l	5.00						
Chrysene	< 5.00		µg/l	5.00						
Dibenzo (a,h) anthracene	< 5.00		µg/l	5.00						
Dibenzofuran	< 5.00		µg/l	5.00						
1,2-Dichlorobenzene	< 5.00		µg/l	5.00						
1,3-Dichlorobenzene	< 5.00		µg/l	5.00						
1,4-Dichlorobenzene	< 5.00		µg/l	5.00						
3,3´-Dichlorobenzidine	< 5.00		µg/l	5.00						
2,4-Dichlorophenol	< 5.00		µg/l	5.00						
Diethyl phthalate	< 5.00		µg/l	5.00						
Dimethyl phthalate	< 5.00		µg/l	5.00						
2,4-Dimethylphenol	< 5.00		µg/l	5.00						
Di-n-butyl phthalate	< 5.00		µg/l	5.00						
4,6-Dinitro-2-methylphenol	< 5.00		µg/l	5.00						
2,4-Dinitrophenol	< 5.00		µg/l	5.00						
2,4-Dinitrotoluene	< 5.00		µg/l	5.00						
2,6-Dinitrotoluene	< 5.00		µg/l	5.00						
Di-n-octyl phthalate	< 5.00		µg/l	5.00						
Fluoranthene	< 5.00		µg/l	5.00						
Fluorene	< 5.00		µg/l	5.00						
Hexachlorobenzene	< 5.00		µg/l	5.00						
Hexachlorobutadiene	< 5.00		µg/l	5.00						
Hexachlorocyclopentadiene	< 5.00		µg/l	5.00						
Hexachloroethane	< 5.00		µg/l	5.00						
Indeno (1,2,3-cd) pyrene	< 5.00		µg/l	5.00						
Isophorone	< 5.00		µg/l	5.00						
2-Methylnaphthalene	< 5.00		µg/l	5.00						
2-Methylphenol	< 5.00		µg/l	5.00						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1409280 - SW846 3510C										
Blank (1409280-BLK1)					Prepared & Analyzed: 29-Apr-14					
3 & 4-Methylphenol	< 10.0		µg/l	10.0						
Naphthalene	< 5.00		µg/l	5.00						
2-Nitroaniline	< 5.00		µg/l	5.00						
3-Nitroaniline	< 5.00		µg/l	5.00						
4-Nitroaniline	< 20.0		µg/l	20.0						
Nitrobenzene	< 5.00		µg/l	5.00						
2-Nitrophenol	< 5.00		µg/l	5.00						
4-Nitrophenol	< 20.0		µg/l	20.0						
N-Nitrosodimethylamine	< 5.00		µg/l	5.00						
N-Nitrosodi-n-propylamine	< 5.00		µg/l	5.00						
N-Nitrosodiphenylamine	< 5.00		µg/l	5.00						
Pentachlorophenol	< 20.0		µg/l	20.0						
Phenanthrene	< 5.00		µg/l	5.00						
Phenol	< 5.00		µg/l	5.00						
Pyrene	< 5.00		µg/l	5.00						
Pyridine	< 5.00		µg/l	5.00						
1,2,4-Trichlorobenzene	< 5.00		µg/l	5.00						
1-Methylnaphthalene	< 5.00		µg/l	5.00						
2,4,5-Trichlorophenol	< 5.00		µg/l	5.00						
2,4,6-Trichlorophenol	< 5.00		µg/l	5.00						
Pentachloronitrobenzene	< 5.00		µg/l	5.00						
1,2,4,5-Tetrachlorobenzene	< 5.00		µg/l	5.00						
Surrogate: 2-Fluorobiphenyl	*34.0*		µg/l		*50.0*		*68*	*30-130*		
Surrogate: 2-Fluorophenol	*24.1*		µg/l		*50.0*		*48*	*15-110*		
Surrogate: Nitrobenzene-d5	*34.9*		µg/l		*50.0*		*70*	*30-130*		
Surrogate: Phenol-d5	*15.9*		µg/l		*50.0*		*32*	*15-110*		
Surrogate: Terphenyl-dl4	*41.6*		µg/l		*50.0*		*83*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*42.9*		µg/l		*50.0*		*86*	*15-110*		
LCS (1409280-BS1)					Prepared & Analyzed: 29-Apr-14					
Acenaphthene	**40.8**		µg/l	5.00	50.0		82	40-130		
Acenaphthylene	**44.2**		µg/l	5.00	50.0		88	40-130		
Aniline	**38.6**		µg/l	5.00	50.0		77	40-130		
Anthracene	**39.1**		µg/l	5.00	50.0		78	40-130		
Azobenzene/Diphenyldiazene	**38.0**		µg/l	5.00	50.0		76	40-130		
Benzidine	**46.8**		µg/l	5.00	50.0		94	40-140		
Benzo (a) anthracene	**37.6**		µg/l	5.00	50.0		75	40-130		
Benzo (a) pyrene	**38.4**		µg/l	5.00	50.0		77	40-130		
Benzo (b) fluoranthene	**36.1**		µg/l	5.00	50.0		72	40-130		
Benzo (g,h,i) perylene	**40.1**		µg/l	5.00	50.0		80	40-130		
Benzo (k) fluoranthene	**36.5**		µg/l	5.00	50.0		73	40-130		
Benzoic acid	**9.79**	QC2	µg/l	5.00	50.0		20	40-130		
Benzyl alcohol	**29.0**		µg/l	5.00	50.0		58	40-130		
Bis(2-chloroethoxy)methane	**29.0**		µg/l	5.00	50.0		58	40-130		
Bis(2-chloroethyl)ether	**28.7**		µg/l	5.00	50.0		57	40-130		
Bis(2-chloroisopropyl)ether	**30.4**		µg/l	5.00	50.0		61	40-130		
Bis(2-ethylhexyl)phthalate	**36.4**		µg/l	5.00	50.0		73	40-130		
4-Bromophenyl phenyl ether	**37.1**		µg/l	5.00	50.0		74	40-130		
Butyl benzyl phthalate	**35.9**		µg/l	5.00	50.0		72	40-130		
Carbazole	**87.3**	QC2	µg/l	5.00	50.0		175	40-130		
4-Chloro-3-methylphenol	**35.6**		µg/l	5.00	50.0		71	40-130		
4-Chloroaniline	**42.1**		µg/l	5.00	50.0		84	40-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1409280 - SW846 3510C										
LCS (1409280-BS1)					Prepared & Analyzed: 29-Apr-14					
2-Chloronaphthalene	**37.2**		µg/l	5.00	50.0		74	40-130		
2-Chlorophenol	**32.4**		µg/l	5.00	50.0		65	40-130		
4-Chlorophenyl phenyl ether	**48.1**		µg/l	5.00	50.0		96	40-130		
Chrysene	**39.2**		µg/l	5.00	50.0		78	40-130		
Dibenzo (a,h) anthracene	**43.8**		µg/l	5.00	50.0		88	40-130		
Dibenzofuran	**41.2**		µg/l	5.00	50.0		82	40-130		
1,2-Dichlorobenzene	**35.1**		µg/l	5.00	50.0		70	40-130		
1,3-Dichlorobenzene	**33.3**		µg/l	5.00	50.0		67	40-130		
1,4-Dichlorobenzene	**35.1**		µg/l	5.00	50.0		70	40-130		
3,3´-Dichlorobenzidine	**54.6**		µg/l	5.00	50.0		109	40-130		
2,4-Dichlorophenol	**38.6**		µg/l	5.00	50.0		77	40-130		
Diethyl phthalate	**45.5**		µg/l	5.00	50.0		91	40-130		
Dimethyl phthalate	**44.0**		µg/l	5.00	50.0		88	40-130		
2,4-Dimethylphenol	**33.4**		µg/l	5.00	50.0		67	40-130		
Di-n-butyl phthalate	**38.2**		µg/l	5.00	50.0		76	40-130		
4,6-Dinitro-2-methylphenol	**43.9**		µg/l	5.00	50.0		88	40-130		
2,4-Dinitrophenol	**42.1**		µg/l	5.00	50.0		84	40-130		
2,4-Dinitrotoluene	**49.8**		µg/l	5.00	50.0		100	40-130		
2,6-Dinitrotoluene	**45.3**		µg/l	5.00	50.0		91	40-130		
Di-n-octyl phthalate	**36.7**		µg/l	5.00	50.0		73	40-130		
Fluoranthene	**40.5**		µg/l	5.00	50.0		81	40-130		
Fluorene	**45.8**		µg/l	5.00	50.0		92	40-130		
Hexachlorobenzene	**39.9**		µg/l	5.00	50.0		80	40-130		
Hexachlorobutadiene	**36.9**		µg/l	5.00	50.0		74	40-130		
Hexachlorocyclopentadiene	**42.3**		µg/l	5.00	50.0		85	40-130		
Hexachloroethane	**36.6**		µg/l	5.00	50.0		73	40-130		
Indeno (1,2,3-cd) pyrene	**45.2**		µg/l	5.00	50.0		90	40-130		
Isophorone	**30.2**		µg/l	5.00	50.0		60	40-130		
2-Methylnaphthalene	**35.6**		µg/l	5.00	50.0		71	40-130		
2-Methylphenol	**32.1**		µg/l	5.00	50.0		64	40-130		
3 & 4-Methylphenol	**31.2**		µg/l	10.0	50.0		62	40-130		
Naphthalene	**37.1**		µg/l	5.00	50.0		74	40-130		
2-Nitroaniline	**39.7**		µg/l	5.00	50.0		79	40-130		
3-Nitroaniline	**71.5**	QC2	µg/l	5.00	50.0		143	40-130		
4-Nitroaniline	**62.0**		µg/l	5.00	50.0		124	40-130		
Nitrobenzene	**35.6**		µg/l	5.00	50.0		71	40-130		
2-Nitrophenol	**37.7**		µg/l	5.00	50.0		75	40-130		
4-Nitrophenol	**47.5**		µg/l	5.00	50.0		95	40-130		
N-Nitrosodimethylamine	**20.8**		µg/l	5.00	50.0		42	40-130		
N-Nitrosodi-n-propylamine	**38.4**		µg/l	5.00	50.0		77	40-130		
N-Nitrosodiphenylamine	**67.8**	QC2	µg/l	5.00	50.0		136	40-130		
Pentachlorophenol	**32.4**		µg/l	5.00	50.0		65	40-130		
Phenanthrene	**36.7**		µg/l	5.00	50.0		73	40-130		
Phenol	**15.4**		µg/l	5.00	50.0		31	30-130		
Pyrene	**40.0**		µg/l	5.00	50.0		80	40-130		
Pyridine	**16.2**	QC2	µg/l	5.00	50.0		32	40-130		
1,2,4-Trichlorobenzene	**35.3**		µg/l	5.00	50.0		71	40-130		
1-Methylnaphthalene	**34.4**		µg/l	5.00	50.0		69	40-140		
2,4,5-Trichlorophenol	**41.5**		µg/l	5.00	50.0		83	40-130		
2,4,6-Trichlorophenol	**40.3**		µg/l	5.00	50.0		81	40-130		
Pentachloronitrobenzene	**46.0**		µg/l	5.00	50.0		92	40-140		
1,2,4,5-Tetrachlorobenzene	**39.4**		µg/l	5.00	50.0		79	40-140		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1409280 - SW846 3510C										
LCS (1409280-BS1)					Prepared & Analyzed: 29-Apr-14					
Surrogate: 2-Fluorobiphenyl	*38.0*		µg/l		*50.0*		*76*	*30-130*		
Surrogate: 2-Fluorophenol	*21.4*		µg/l		*50.0*		*43*	*15-110*		
Surrogate: Nitrobenzene-d5	*36.3*		µg/l		*50.0*		*73*	*30-130*		
Surrogate: Phenol-d5	*14.5*		µg/l		*50.0*		*29*	*15-110*		
Surrogate: Terphenyl-dl4	*45.7*		µg/l		*50.0*		*91*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*48.0*		µg/l		*50.0*		*96*	*15-110*		
LCS Dup (1409280-BSD1)					Prepared & Analyzed: 29-Apr-14					
Acenaphthene	**37.5**		µg/l	5.00	50.0		75	40-140	8	20
Acenaphthylene	**43.7**		µg/l	5.00	50.0		87	40-140	1	20
Aniline	**41.7**		µg/l	5.00	50.0		83	40-140	8	20
Anthracene	**41.3**		µg/l	5.00	50.0		83	40-140	6	20
Azobenzene/Diphenyldiazene	**35.3**		µg/l	5.00	50.0		71	40-140	7	20
Benzidine	**39.1**		µg/l	5.00	50.0		78	40-140	18	20
Benzo (a) anthracene	**37.4**		µg/l	5.00	50.0		75	40-140	0.5	20
Benzo (a) pyrene	**41.7**		µg/l	5.00	50.0		83	40-140	8	20
Benzo (b) fluoranthene	**40.9**		µg/l	5.00	50.0		82	40-140	13	20
Benzo (g,h,i) perylene	**39.5**		µg/l	5.00	50.0		79	40-140	2	20
Benzo (k) fluoranthene	**40.6**		µg/l	5.00	50.0		81	40-140	10	20
Benzoic acid	**11.1**	QC2	µg/l	5.00	50.0		22	30-130	12	20
Benzyl alcohol	**29.7**		µg/l	5.00	50.0		59	40-140	3	20
Bis(2-chloroethoxy)methane	**27.3**		µg/l	5.00	50.0		55	40-140	6	20
Bis(2-chloroethyl)ether	**31.7**		µg/l	5.00	50.0		63	40-140	10	20
Bis(2-chloroisopropyl)ether	**29.0**		µg/l	5.00	50.0		58	40-140	5	20
Bis(2-ethylhexyl)phthalate	**36.4**		µg/l	5.00	50.0		73	40-140	0.05	20
4-Bromophenyl phenyl ether	**40.4**		µg/l	5.00	50.0		81	40-140	8	20
Butyl benzyl phthalate	**35.5**		µg/l	5.00	50.0		71	40-140	1	20
Carbazole	**88.9**	QC2	µg/l	5.00	50.0		178	40-140	2	20
4-Chloro-3-methylphenol	**36.8**		µg/l	5.00	50.0		74	30-130	4	20
4-Chloroaniline	**46.1**		µg/l	5.00	50.0		92	40-140	9	20
2-Chloronaphthalene	**36.8**		µg/l	5.00	50.0		74	40-140	1	20
2-Chlorophenol	**31.9**		µg/l	5.00	50.0		64	30-130	2	20
4-Chlorophenyl phenyl ether	**48.9**		µg/l	5.00	50.0		98	40-140	2	20
Chrysene	**40.4**		µg/l	5.00	50.0		81	40-140	3	20
Dibenzo (a,h) anthracene	**43.0**		µg/l	5.00	50.0		86	40-140	2	20
Dibenzofuran	**40.9**		µg/l	5.00	50.0		82	40-140	0.8	20
1,2-Dichlorobenzene	**33.4**		µg/l	5.00	50.0		67	40-140	5	20
1,3-Dichlorobenzene	**32.1**		µg/l	5.00	50.0		64	40-140	4	20
1,4-Dichlorobenzene	**33.9**		µg/l	5.00	50.0		68	40-140	3	20
3,3´-Dichlorobenzidine	**55.0**		µg/l	5.00	50.0		110	40-140	0.9	20
2,4-Dichlorophenol	**39.1**		µg/l	5.00	50.0		78	30-130	1	20
Diethyl phthalate	**46.4**		µg/l	5.00	50.0		93	40-140	2	20
Dimethyl phthalate	**43.5**		µg/l	5.00	50.0		87	40-140	1	20
2,4-Dimethylphenol	**29.7**		µg/l	5.00	50.0		59	30-130	12	20
Di-n-butyl phthalate	**39.4**		µg/l	5.00	50.0		79	40-140	3	20
4,6-Dinitro-2-methylphenol	**41.8**		µg/l	5.00	50.0		84	30-130	5	20
2,4-Dinitrophenol	**40.4**		µg/l	5.00	50.0		81	30-130	4	20
2,4-Dinitrotoluene	**48.0**		µg/l	5.00	50.0		96	40-140	4	20
2,6-Dinitrotoluene	**43.8**		µg/l	5.00	50.0		88	40-140	3	20
Di-n-octyl phthalate	**40.0**		µg/l	5.00	50.0		80	40-140	8	20
Fluoranthene	**41.9**		µg/l	5.00	50.0		84	40-140	3	20
Fluorene	**46.9**		µg/l	5.00	50.0		94	40-140	3	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1409280 - SW846 3510C										
LCS Dup (1409280-BSD1)					Prepared & Analyzed: 29-Apr-14					
Hexachlorobenzene	**43.1**		µg/l	5.00	50.0		86	40-140	8	20
Hexachlorobutadiene	**34.9**		µg/l	5.00	50.0		70	40-140	6	20
Hexachlorocyclopentadiene	**42.0**		µg/l	5.00	50.0		84	40-140	0.6	20
Hexachloroethane	**31.5**		µg/l	5.00	50.0		63	40-140	15	20
Indeno (1,2,3-cd) pyrene	**44.3**		µg/l	5.00	50.0		89	40-140	2	20
Isophorone	**27.8**		µg/l	5.00	50.0		56	40-140	8	20
2-Methylnaphthalene	**38.2**		µg/l	5.00	50.0		76	40-140	7	20
2-Methylphenol	**26.3**		µg/l	5.00	50.0		53	30-130	20	20
3 & 4-Methylphenol	**24.6**	QR2	µg/l	10.0	50.0		49	30-130	23	20
Naphthalene	**37.5**		µg/l	5.00	50.0		75	40-140	1	20
2-Nitroaniline	**41.2**		µg/l	5.00	50.0		82	40-140	4	20
3-Nitroaniline	**74.8**	QC2	µg/l	5.00	50.0		150	40-140	4	20
4-Nitroaniline	**66.8**		µg/l	20.0	50.0		134	40-140	8	20
Nitrobenzene	**33.1**		µg/l	5.00	50.0		66	40-140	7	20
2-Nitrophenol	**35.3**		µg/l	5.00	50.0		71	30-130	6	20
4-Nitrophenol	**37.6**	QR2	µg/l	20.0	50.0		75	30-130	23	20
N-Nitrosodimethylamine	**22.2**		µg/l	5.00	50.0		44	40-140	7	20
N-Nitrosodi-n-propylamine	**36.4**		µg/l	5.00	50.0		73	40-140	5	20
N-Nitrosodiphenylamine	**62.3**		µg/l	5.00	50.0		125	40-140	9	20
Pentachlorophenol	**36.4**		µg/l	20.0	50.0		73	30-130	12	20
Phenanthrene	**38.0**		µg/l	5.00	50.0		76	40-140	3	20
Phenol	**11.8**	QC2, QR9	µg/l	5.00	50.0		24	30-130	27	20
Pyrene	**39.3**		µg/l	5.00	50.0		79	40-140	2	20
Pyridine	**15.6**	QC2	µg/l	5.00	50.0		31	40-140	4	20
1,2,4-Trichlorobenzene	**34.6**		µg/l	5.00	50.0		69	40-140	2	20
1-Methylnaphthalene	**34.7**		µg/l	5.00	50.0		69	40-140	1	20
2,4,5-Trichlorophenol	**41.1**		µg/l	5.00	50.0		82	30-130	1	20
2,4,6-Trichlorophenol	**41.2**		µg/l	5.00	50.0		82	30-130	2	20
Pentachloronitrobenzene	**48.6**		µg/l	5.00	50.0		97	40-140	5	20
1,2,4,5-Tetrachlorobenzene	**39.6**		µg/l	5.00	50.0		79	40-140	0.5	20
Surrogate: 2-Fluorobiphenyl	*19.4*		µg/l		*50.0*		*39*	*30-130*		
Surrogate: 2-Fluorophenol	*8.87*		µg/l		*50.0*		*18*	*15-110*		
Surrogate: Nitrobenzene-d5	*17.5*		µg/l		*50.0*		*35*	*30-130*		
Surrogate: Phenol-d5	*5.70*	SAC	µg/l		*50.0*		*11*	*15-110*		
Surrogate: Terphenyl-dl4	*21.0*		µg/l		*50.0*		*42*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*22.9*		µg/l		*50.0*		*46*	*15-110*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1409281 - SW846 3510C										
Blank (1409281-BLK1)					Prepared: 29-Apr-14 Analyzed: 30-Apr-14					
Aroclor-1016	< 0.200		µg/l	0.200						
Aroclor-1016 [2C]	< 0.200		µg/l	0.200						
Aroclor-1221	< 0.200		µg/l	0.200						
Aroclor-1221 [2C]	< 0.200		µg/l	0.200						
Aroclor-1232	< 0.200		µg/l	0.200						
Aroclor-1232 [2C]	< 0.200		µg/l	0.200						
Aroclor-1242	< 0.200		µg/l	0.200						
Aroclor-1242 [2C]	< 0.200		µg/l	0.200						
Aroclor-1248	< 0.200		µg/l	0.200						
Aroclor-1248 [2C]	< 0.200		µg/l	0.200						
Aroclor-1254	< 0.200		µg/l	0.200						
Aroclor-1254 [2C]	< 0.200		µg/l	0.200						
Aroclor-1260	< 0.200		µg/l	0.200						
Aroclor-1260 [2C]	< 0.200		µg/l	0.200						
Aroclor-1262	< 0.200		µg/l	0.200						
Aroclor-1262 [2C]	< 0.200		µg/l	0.200						
Aroclor-1268	< 0.200		µg/l	0.200						
Aroclor-1268 [2C]	< 0.200		µg/l	0.200						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	*0.190*		µg/l		*0.200*		*95*	*30-150*		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	*0.200*		µg/l		*0.200*		*100*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr)	*0.180*		µg/l		*0.200*		*90*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr) [2C]	*0.180*		µg/l		*0.200*		*90*	*30-150*		
LCS (1409281-BS1)					Prepared: 29-Apr-14 Analyzed: 30-Apr-14					
Aroclor-1016	**2.61**		µg/l	0.200	2.50		104	40-140		
Aroclor-1016 [2C]	**2.63**		µg/l	0.200	2.50		105	40-140		
Aroclor-1260	**2.51**		µg/l	0.200	2.50		100	40-140		
Aroclor-1260 [2C]	**2.43**		µg/l	0.200	2.50		97	40-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	*0.220*		µg/l		*0.200*		*110*	*30-150*		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	*0.230*		µg/l		*0.200*		*115*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr)	*0.190*		µg/l		*0.200*		*95*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr) [2C]	*0.200*		µg/l		*0.200*		*100*	*30-150*		
LCS Dup (1409281-BSD1)					Prepared: 29-Apr-14 Analyzed: 30-Apr-14					
Aroclor-1016	**2.60**		µg/l	0.200	2.50		104	40-140	0.4	20
Aroclor-1016 [2C]	**2.61**		µg/l	0.200	2.50		104	40-140	0.8	20
Aroclor-1260	**2.46**		µg/l	0.200	2.50		98	40-140	2	20
Aroclor-1260 [2C]	**2.48**		µg/l	0.200	2.50		99	40-140	2	20
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	*0.220*		µg/l		*0.200*		*110*	*30-150*		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	*0.220*		µg/l		*0.200*		*110*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr)	*0.190*		µg/l		*0.200*		*95*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr) [2C]	*0.210*		µg/l		*0.200*		*105*	*30-150*		

Extractable Petroleum Hydrocarbons - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1409279 - SW846 3510C										
Blank (1409279-BLK1)					Prepared & Analyzed: 29-Apr-14					
Gasoline	< 0.2		mg/l	0.2						
Fuel Oil #2	< 0.2		mg/l	0.2						
Fuel Oil #4	< 0.2		mg/l	0.2						
Fuel Oil #6	< 0.2		mg/l	0.2						
Motor Oil	< 0.2		mg/l	0.2						
Ligroin	< 0.2		mg/l	0.2						
Aviation Fuel	< 0.2		mg/l	0.2						
Hydraulic Oil	< 0.2		mg/l	0.2						
Dielectric Fluid	< 0.2		mg/l	0.2						
Unidentified	< 0.2		mg/l	0.2						
Other Oil	< 0.2		mg/l	0.2						
Total Petroleum Hydrocarbons	< 0.2		mg/l	0.2						
Surrogate: 1-Chlorooctadecane	*0.0295*		mg/l		*0.0500*		*59*	*40-140*		
LCS (1409279-BS2)					Prepared & Analyzed: 29-Apr-14					
Fuel Oil #2	**8.8**		mg/l	0.2	10.0		88	40-140		
Surrogate: 1-Chlorooctadecane	*0.0507*		mg/l		*0.0500*		*101*	*40-140*		
LCS Dup (1409279-BSD2)					Prepared & Analyzed: 29-Apr-14					
Fuel Oil #2	**9.0**		mg/l	0.2	10.0		90	40-140	2	200
Surrogate: 1-Chlorooctadecane	*0.0498*		mg/l		*0.0500*		*100*	*40-140*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1409265 - SW846 3005A										
Blank (1409265-BLK1)					Prepared & Analyzed: 30-Apr-14					
Iron	< 0.0150		mg/l	0.0150						
Selenium	< 0.0150		mg/l	0.0150						
Antimony	< 0.0060		mg/l	0.0060						
Lead	< 0.0075		mg/l	0.0075						
Nickel	< 0.0050		mg/l	0.0050						
Copper	< 0.0050		mg/l	0.0050						
Chromium	< 0.0050		mg/l	0.0050						
Cadmium	< 0.0025		mg/l	0.0025						
Arsenic	< 0.0040		mg/l	0.0040						
Silver	< 0.0050		mg/l	0.0050						
Zinc	< 0.0090		mg/l	0.0090						
LCS (1409265-BS1)					Prepared & Analyzed: 30-Apr-14					
Iron	**1.28**		mg/l	0.0150	1.25		103	85-115		
Cadmium	**1.28**		mg/l	0.0025	1.25		102	85-115		
Zinc	**1.31**		mg/l	0.0090	1.25		105	85-115		
Selenium	**1.30**		mg/l	0.0150	1.25		104	85-115		
Antimony	**1.26**		mg/l	0.0060	1.25		101	85-115		
Lead	**1.29**		mg/l	0.0075	1.25		103	85-115		
Nickel	**1.27**		mg/l	0.0050	1.25		101	85-115		
Chromium	**1.32**		mg/l	0.0050	1.25		106	85-115		
Arsenic	**1.29**		mg/l	0.0040	1.25		103	85-115		
Silver	**1.27**		mg/l	0.0050	1.25		102	85-115		
Copper	**1.32**		mg/l	0.0050	1.25		106	85-115		
LCS Dup (1409265-BSD1)					Prepared & Analyzed: 30-Apr-14					
Iron	**1.30**		mg/l	0.0150	1.25		104	85-115	2	20
Arsenic	**1.26**		mg/l	0.0040	1.25		101	85-115	2	20
Cadmium	**1.27**		mg/l	0.0025	1.25		102	85-115	0.4	20
Chromium	**1.30**		mg/l	0.0050	1.25		104	85-115	2	20
Copper	**1.31**		mg/l	0.0050	1.25		105	85-115	0.6	20
Nickel	**1.26**		mg/l	0.0050	1.25		101	85-115	0.9	20
Lead	**1.28**		mg/l	0.0075	1.25		102	85-115	0.7	20
Antimony	**1.24**		mg/l	0.0060	1.25		100	85-115	1	20
Selenium	**1.28**		mg/l	0.0150	1.25		103	85-115	1	20
Zinc	**1.31**		mg/l	0.0090	1.25		105	85-115	0.5	20
Silver	**1.24**		mg/l	0.0050	1.25		99	85-115	3	20
Duplicate (1409265-DUP1)			**Source: SB88395-03**		Prepared & Analyzed: 30-Apr-14					
Iron	**0.485**		mg/l	0.0150		0.408			17	20
Cadmium	< 0.0025		mg/l	0.0025		BRL				20
Chromium	**0.0024**	J	mg/l	0.0050		0.0023			4	20
Copper	< 0.0050		mg/l	0.0050		BRL				20
Nickel	< 0.0050		mg/l	0.0050		BRL				20
Lead	< 0.0075		mg/l	0.0075		BRL				20
Antimony	< 0.0060		mg/l	0.0060		BRL				20
Selenium	< 0.0150		mg/l	0.0150		BRL				20
Zinc	**0.0034**	J,QR8	mg/l	0.0090		0.0072			73	20
Silver	< 0.0050		mg/l	0.0050		BRL				20
Arsenic	**0.0054**	QR8	mg/l	0.0040		0.0042			24	20
Matrix Spike (1409265-MS1)			**Source: SB88395-03**		Prepared & Analyzed: 30-Apr-14					
Iron	**1.72**		mg/l	0.0150	1.25	0.408	105	75-125		
Zinc	**1.27**		mg/l	0.0090	1.25	0.0072	101	75-125		
Selenium	**1.29**		mg/l	0.0150	1.25	BRL	103	75-125		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1409265 - SW846 3005A										
Matrix Spike (1409265-MS1)			**Source: SB88395-03**		Prepared & Analyzed: 30-Apr-14					
Antimony	**1.27**		mg/l	0.0060	1.25	BRL	101	75-125		
Lead	**1.25**		mg/l	0.0075	1.25	BRL	100	75-125		
Copper	**1.30**		mg/l	0.0050	1.25	BRL	104	75-125		
Chromium	**1.29**		mg/l	0.0050	1.25	0.0023	103	75-125		
Cadmium	**1.26**		mg/l	0.0025	1.25	BRL	101	75-125		
Arsenic	**1.29**		mg/l	0.0040	1.25	0.0042	103	75-125		
Silver	**1.26**		mg/l	0.0050	1.25	BRL	100	75-125		
Nickel	**1.23**		mg/l	0.0050	1.25	BRL	99	75-125		
Matrix Spike Dup (1409265-MSD1)			**Source: SB88395-03**		Prepared & Analyzed: 30-Apr-14					
Iron	**1.78**		mg/l	0.0150	1.25	0.408	110	75-125	3	20
Lead	**1.26**		mg/l	0.0075	1.25	BRL	101	75-125	0.3	20
Arsenic	**1.29**		mg/l	0.0040	1.25	0.0042	102	75-125	0.5	20
Zinc	**1.28**		mg/l	0.0090	1.25	0.0072	101	75-125	0.5	20
Selenium	**1.29**		mg/l	0.0150	1.25	BRL	103	75-125	0.2	20
Antimony	**1.27**		mg/l	0.0060	1.25	BRL	102	75-125	0.4	20
Copper	**1.32**		mg/l	0.0050	1.25	BRL	106	75-125	1	20
Cadmium	**1.27**		mg/l	0.0025	1.25	BRL	102	75-125	0.6	20
Silver	**1.25**		mg/l	0.0050	1.25	BRL	100	75-125	0.7	20
Nickel	**1.24**		mg/l	0.0050	1.25	BRL	99	75-125	0.3	20
Chromium	**1.29**		mg/l	0.0050	1.25	0.0023	103	75-125	0.2	20
Post Spike (1409265-PS1)			**Source: SB88395-03**		Prepared & Analyzed: 30-Apr-14					
Iron	**1.58**		mg/l	0.0150	1.25	0.408	94	80-120		
Zinc	**1.26**		mg/l	0.0090	1.25	0.0072	100	80-120		
Selenium	**1.27**		mg/l	0.0150	1.25	BRL	102	80-120		
Antimony	**1.25**		mg/l	0.0060	1.25	BRL	100	80-120		
Lead	**1.24**		mg/l	0.0075	1.25	BRL	99	80-120		
Nickel	**1.22**		mg/l	0.0050	1.25	BRL	98	80-120		
Chromium	**1.29**		mg/l	0.0050	1.25	0.0023	103	80-120		
Cadmium	**1.26**		mg/l	0.0025	1.25	BRL	101	80-120		
Arsenic	**1.27**		mg/l	0.0040	1.25	0.0042	101	80-120		
Silver	**1.25**		mg/l	0.0050	1.25	BRL	100	80-120		
Copper	**1.32**		mg/l	0.0050	1.25	BRL	105	80-120		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1409262 - EPA200/SW7000 Series										
Blank (1409262-BLK1)						Prepared & Analyzed: 30-Apr-14				
Mercury	< 0.00020		mg/l	0.00020						
LCS (1409262-BS1)						Prepared & Analyzed: 30-Apr-14				
Mercury	**0.00575**		mg/l	0.00020	0.00500		115	85-115		
Duplicate (1409262-DUP1)			**Source: SB88395-05**			Prepared & Analyzed: 30-Apr-14				
Mercury	< 0.00020		mg/l	0.00020		BRL				20
Matrix Spike (1409262-MS1)			**Source: SB88395-05**			Prepared & Analyzed: 30-Apr-14				
Mercury	**0.00547**		mg/l	0.00020	0.00500	BRL	109	80-120		
Matrix Spike Dup (1409262-MSD1)			**Source: SB88395-05**			Prepared & Analyzed: 30-Apr-14				
Mercury	**0.00521**		mg/l	0.00020	0.00500	BRL	104	80-120	5	20
Post Spike (1409262-PS1)			**Source: SB88395-05**			Prepared & Analyzed: 30-Apr-14				
Mercury	**0.00554**		mg/l	0.00020	0.00500	BRL	111	85-115		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1409263 - General Preparation										
Blank (1409263-BLK1)						Prepared & Analyzed: 28-Apr-14				
Hexavalent Chromium	< 0.005		mg/l	0.005						
LCS (1409263-BS1)						Prepared & Analyzed: 28-Apr-14				
Hexavalent Chromium	**0.053**		mg/l	0.005	0.0500		106	80-120		
Calibration Blank (1409263-CCB1)						Prepared & Analyzed: 28-Apr-14				
Hexavalent Chromium	**-0.001**		mg/l							
Calibration Blank (1409263-CCB2)						Prepared & Analyzed: 28-Apr-14				
Hexavalent Chromium	**-0.002**		mg/l							
Calibration Blank (1409263-CCB3)						Prepared & Analyzed: 28-Apr-14				
Hexavalent Chromium	**-0.002**		mg/l							
Calibration Check (1409263-CCV1)						Prepared & Analyzed: 28-Apr-14				
Hexavalent Chromium	**0.053**		mg/l	0.005	0.0500		106	90-110		
Calibration Check (1409263-CCV2)						Prepared & Analyzed: 28-Apr-14				
Hexavalent Chromium	**0.052**		mg/l	0.005	0.0500		105	90-110		
Calibration Check (1409263-CCV3)						Prepared & Analyzed: 28-Apr-14				
Hexavalent Chromium	**0.053**		mg/l	0.005	0.0500		105	90-110		
Duplicate (1409263-DUP1)			**Source: SB88395-03**			Prepared & Analyzed: 28-Apr-14				
Hexavalent Chromium	< 0.005		mg/l	0.005		BRL				20
Matrix Spike (1409263-MS1)			**Source: SB88395-03**			Prepared & Analyzed: 28-Apr-14				
Hexavalent Chromium	**0.050**		mg/l	0.005	0.0500	BRL	100	85-115		
Matrix Spike Dup (1409263-MSD1)			**Source: SB88395-03**			Prepared & Analyzed: 28-Apr-14				
Hexavalent Chromium	**0.050**		mg/l	0.005	0.0500	BRL	99	85-115	0.6	20
Reference (1409263-SRM1)						Prepared & Analyzed: 28-Apr-14				
Hexavalent Chromium	**0.025**		mg/l	0.005	0.0250		100	85-115		
Batch 1409299 - General Preparation										
Blank (1409299-BLK1)						Prepared: 29-Apr-14 Analyzed: 30-Apr-14				
Total Suspended Solids	< 5.0		mg/l	5.0						
LCS (1409299-BS1)						Prepared: 29-Apr-14 Analyzed: 30-Apr-14				
Total Suspended Solids	**98.0**		mg/l	10.0	100		98	90-110		
Batch 1409336 - General Preparation										
Blank (1409336-BLK1)						Prepared & Analyzed: 29-Apr-14				
Total Residual Chlorine	< 0.020		mg/l	0.020						
LCS (1409336-BS1)						Prepared & Analyzed: 29-Apr-14				
Total Residual Chlorine	**0.049**		mg/l	0.020	0.0500		99	90-110		
Duplicate (1409336-DUP1)			**Source: SB88395-05**			Prepared & Analyzed: 29-Apr-14				
Total Residual Chlorine	< 0.020		mg/l	0.020		BRL				20
Matrix Spike (1409336-MS1)			**Source: SB88395-05**			Prepared & Analyzed: 29-Apr-14				
Total Residual Chlorine	**0.056**		mg/l	0.020	0.0500	BRL	112	80-120		
Matrix Spike Dup (1409336-MSD1)			**Source: SB88395-05**			Prepared & Analyzed: 29-Apr-14				
Total Residual Chlorine	**0.056**		mg/l	0.020	0.0500	BRL	112	80-120	0.2	200
Reference (1409336-SRM1)						Prepared & Analyzed: 29-Apr-14				
Total Residual Chlorine	**0.114**		mg/l	0.020	0.115		99	85-115		
Batch 1409382 - General Preparation										
Blank (1409382-BLK1)						Prepared: 29-Apr-14 Analyzed: 01-May-14				
Chloride	< 1.00		mg/l	1.00						
LCS (1409382-BS1)						Prepared: 29-Apr-14 Analyzed: 01-May-14				
Chloride	**19.8**		mg/l	1.00	20.0		99	90-110		
Batch 1409385 - General Preparation										
Blank (1409385-BLK1)						Prepared: 29-Apr-14 Analyzed: 30-Apr-14				
Cyanide (total)	< 0.00500		mg/l	0.00500						

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1409385 - General Preparation										
Blank (1409385-BLK2)					Prepared: 29-Apr-14		Analyzed: 30-Apr-14			
Cyanide (total)	< 0.00500		mg/l	0.00500						
LCS (1409385-BS1)					Prepared: 29-Apr-14		Analyzed: 30-Apr-14			
Cyanide (total)	**0.275**		mg/l	0.00500	0.300		92	90-110		
LCS (1409385-BS2)					Prepared: 29-Apr-14		Analyzed: 30-Apr-14			
Cyanide (total)	**0.292**		mg/l	0.00500	0.300		97	90-110		
Duplicate (1409385-DUP1)			**Source: SB88395-01**		Prepared: 29-Apr-14		Analyzed: 30-Apr-14			
Cyanide (total)	< 0.00500		mg/l	0.00500		BRL				20
Matrix Spike (1409385-MS1)			**Source: SB88395-01**		Prepared: 29-Apr-14		Analyzed: 30-Apr-14			
Cyanide (total)	**0.293**		mg/l	0.00500	0.300	BRL	98	90-110		
Matrix Spike Dup (1409385-MSD1)			**Source: SB88395-01**		Prepared: 29-Apr-14		Analyzed: 30-Apr-14			
Cyanide (total)	**0.295**		mg/l	0.00500	0.300	BRL	98	90-110	0.7	20
Reference (1409385-SRM1)					Prepared: 29-Apr-14		Analyzed: 30-Apr-14			
Cyanide (total)	**0.478**		mg/l	0.00500	0.444		108	75-125		

Notes and Definitions

B	Analyte is found in the associated blank as well as in the sample (CLP B-flag).
D	Data reported from a dilution
GS1	Sample dilution required for high concentration of target analytes to be within the instrument calibration range.
HT3	The collection time was not indicated on the chain of custody. Therefore, the analysis hold time can not be verified.
QB2	The method blank contains analyte at a concentration above the MRL, however no reportable concentration is present in the sample.
QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample.
QR2	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QR5	RPD out of acceptance range.
QR8	Analyses are not controlled on RPD values from sample concentrations that are less than 5 times the reporting level. The batch is accepted based upon the difference between the sample and duplicate is less than or equal to the reporting limit.
QR9	RPD out of acceptance range. The batch is accepted based upon LCS and/or LCSD recovery.
R01	The Reporting Limit has been raised to account for matrix interference.
SAC	Acid surrogate recovery outside of control limits. The data was accepted based on valid recovery of remaining two acid surrogates.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ClHT	The method for residual chlorine indicates that samples should be analyzed immediately. 40 CFR 136 specifies a holding time of 15 minutes from sampling to analysis. Therefore all aqueous residual chlorine samples not analyzed in the field are considered out of hold time at the time of sample receipt.
LIV	The initial volume for this sample has been reduced due to sample matrix and/or historical data therefore elevating the reporting limit.

Interpretation of Total Petroleum Hydrocarbon Report

Petroleum identification is determined by comparing the GC fingerprint obtained from the sample with a library of GC fingerprints obtained from analyses of various petroleum products. Possible match categories are as follows:

Gasoline - includes regular, unleaded, premium, etc.
Fuel Oil #2 - includes home heating oil, #2 fuel oil, and diesel
Fuel Oil #4 - includes #4 fuel oil
Fuel Oil #6 - includes #6 fuel oil and bunker "C" oil
Motor Oil - includes virgin and waste automobile oil
Ligroin - includes mineral spirits, petroleum naphtha, vm&p naphtha
Aviation Fuel - includes kerosene, Jet A and JP-4
Other Oil - includes lubricating and cutting oil, and silicon oil

At times, the unidentified petroleum product is quantified using a calibration that most closely approximates the distribution of compounds in the sample. When this occurs, the result is qualified as Calculated as.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by:
Kimberly Wisk
Rebecca Merz

SB 88395 By

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 4-30-14
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: ECS- Worcester

Telephone #: 774-272-2212
Project Mgr. Chuck Klingler

Invoice To:

P.O. No.: RQN: 7989

Project No.: 03-218836
Site Name: City Square
Location: Worcester State: MA
Sampler(s): J. Ward, A. Kaczowka

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= 12=

List preservative code below:

QA/QC Reporting Notes:
* additional charges may apply

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

MA DEP MCP CAM Report: Yes☒ No☐
CT DPH RCP Report: Yes☐ No☐

QA/QC Reporting Level
☒ Standard ☐ No QC ☐ DQA*
☐ NY ASP A* ☐ NY ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ TIER II* ☐ TIER IV*
☐ Other
State-specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		TPH by 8100 (GRO) w/ EDB	VOCs by 8260 (Full) w/ 1,4 Dioxane	SVOC 8270 (Full) w/ total phenols	PCB 8082	TSS	TRC	Cyanide, Chloride	Total metals: Sb, As, Cd, Cr, Cr VI, Cu, Pb, Hg, Ni, Se, Zn, Fe, Ag	
88395-01	ECS-1	4-28-14	AM	G	GW	3	3		4		X	X	X	X	X	X	X	X	
02	ECS-2	↓	↓	↓	↓	↓	↓		↓		↓	↓	↓	↓	↓	↓	↓	↓	
03	ECS-3																		
04	B-304																		
05	B-310																		
06	Trip Blank					1					X	X							

Relinquished by:	Received by:	Date:	Time:	Temp°C
Aaron Kaczowka	[illegible]	4/28/14	1540	
[illegible]	Mary Anderson	4282014	1755	

☐ EDD Format
☒ E-mail to cklingler@ecsconsult.com

34/0/34 IR01 @ 4282014

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☒ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Report Date:
09-May-14 16:16

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Environmental Compliance Services
997 Millbury Street, Unit G
Worcester, MA 01607
Attn: Charles Klingler

Project: City Square-Front St.-Worcester, MA
Project #: 03-218836

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB88992-01	ECS-4	Ground Water	07-May-14 00:00	07-May-14 16:57
SB88992-02	ECS-5	Ground Water	07-May-14 00:00	07-May-14 16:57
SB88992-03	ECS-1	Ground Water	07-May-14 00:00	07-May-14 16:57

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435

Authorized by:

Nicole Leja
Laboratory Director

Spectrum Analytical holds certification in the State of Massachusetts for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of Massachusetts does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.
Please note that this report contains 39 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, NJ-MA012, PA-68-04426 and FL-E87936).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

CASE NARRATIVE:

Data has been reported to the RDL. This report excludes estimated concentrations detected below the RDL and above the MDL (J-Flag).

The samples were received 0.9 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

EPA 300.0

Samples:

SB88992-01 *ECS-4*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

SB88992-02 *ECS-5*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

SM4500-Cl-G

Spikes:

1410258-MS1 *Source: SB88992-02*

The spike recovery for this QC sample is outside the established control limits. The sample results for the QC batch were accepted based on LCS/LCSD or SRM recoveries within the control limits.

Total Residual Chlorine

1410258-MSD1 *Source: SB88992-02*

The spike recovery for this QC sample is outside the established control limits. The sample results for the QC batch were accepted based on LCS/LCSD or SRM recoveries within the control limits.

Total Residual Chlorine

Samples:

SB88992-01 *ECS-4*

The collection time was not indicated on the chain of custody. Therefore, the analysis hold time can not be verified.

Total Residual Chlorine

SB88992-02 *ECS-5*

The collection time was not indicated on the chain of custody. Therefore, the analysis hold time can not be verified.

Total Residual Chlorine

SW846 8260C

Calibration:

1405013

SW846 8260C

Calibration:

1405013

Analyte quantified by quadratic equation type calibration.

1,2-Dibromo-3-chloropropane
Acrylonitrile
Naphthalene
trans-1,4-Dichloro-2-butene

This affected the following samples:

1410310-BLK1
1410310-BS1
1410310-BSD1
ECS-4
ECS-5
S404883-ICV1
S404890-CCV1

S404883-ICV1

Analyte percent recovery is outside individual acceptance criteria (80-120).

Bromomethane (134%)

This affected the following samples:

1410310-BLK1
1410310-BS1
1410310-BSD1
ECS-4
ECS-5
S404890-CCV1

Laboratory Control Samples:

1410310 BS/BSD

2-Butanone (MEK) percent recoveries (165/108) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

ECS-4
ECS-5

2-Hexanone (MBK) percent recoveries (144/106) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

ECS-4
ECS-5

Acetone percent recoveries (188/105) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

ECS-4
ECS-5

1410310 BSD

2-Butanone (MEK) RPD 42% (20%) is outside individual acceptance criteria.

2-Hexanone (MBK) RPD 30% (20%) is outside individual acceptance criteria.

Acetone RPD 57% (20%) is outside individual acceptance criteria.

SW846 8260C

Samples:

S404890-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Vinyl chloride (20.9%)

This affected the following samples:

1410310-BLK1
1410310-BS1
1410310-BSD1
ECS-4
ECS-5

SW846 8270D

Calibration:

1405005

Analyte quantified by quadratic equation type calibration.

2,4-Dinitrophenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
2-Nitroaniline
2-Nitrophenol
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Nitroaniline
4-Nitrophenol
Benzoic acid

This affected the following samples:

1410273-BLK1
1410273-BS1
1410273-BSD1
ECS-4
ECS-5
S404701-ICV1
S404983-CCV1

S404701-ICV1

Analyte percent recovery is outside individual acceptance criteria (80-120).

Benzidine (74%)

This affected the following samples:

1410273-BLK1
1410273-BS1
1410273-BSD1
ECS-4
ECS-5
S404983-CCV1

Laboratory Control Samples:

1410273 BS/BSD

SW846 8270D

Laboratory Control Samples:

1410273 BS/BSD

2,4-Dinitrophenol percent recoveries (136/137) are outside individual acceptance criteria (30-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

ECS-4
ECS-5

4,6-Dinitro-2-methylphenol percent recoveries (134/134) are outside individual acceptance criteria (30-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

ECS-4
ECS-5

Pyridine percent recoveries (30/30) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

ECS-4
ECS-5

1410273 BSD

1,2,4-Trichlorobenzene RPD 21% (20%) is outside individual acceptance criteria.

Benzidine RPD 21% (20%) is outside individual acceptance criteria.

Hexachlorobutadiene RPD 28% (20%) is outside individual acceptance criteria.

Hexachlorocyclopentadiene RPD 21% (20%) is outside individual acceptance criteria.

Hexachloroethane RPD 29% (20%) is outside individual acceptance criteria.

Samples:

S404983-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

2,4,5-Trichlorophenol (20.9%)
N-Nitrosodimethylamine (-30.1%)
Pentachlorophenol (23.7%)
Pyridine (-33.4%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

2,4-Dinitrophenol (50.2%)
4,6-Dinitro-2-methylphenol (41.1%)
4-Nitroaniline (26.9%)
4-Nitrophenol (-43.0%)

This affected the following samples:

1410273-BLK1
1410273-BS1
1410273-BSD1
ECS-4
ECS-5

Sample Acceptance Check Form

Client:	Environmental Compliance Services - Worcester, MA
Project:	City Square-Front St.-Worcester, MA / 03-218836
Work Order:	SB88992
Sample(s) received on:	5/7/2014
Received by:	Mary Wilson

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	Yes	No	N/A
1. Were custody seals present?	☐	☑	☐
2. Were custody seals intact?	☐	☐	☑
3. Were samples received at a temperature of ≤ 6°C?	☑	☐	☐
4. Were samples cooled on ice upon transfer to laboratory representative?	☑	☐	☐
5. Were samples refrigerated upon transfer to laboratory representative?	☐	☑	☐
6. Were sample containers received intact?	☑	☐	☐
7. Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	☑	☐	☐
8. Were samples accompanied by a Chain of Custody document?	☑	☐	☐
9. Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	☐	☑	☐
10. Did sample container labels agree with Chain of Custody document?	☑	☐	☐
11. Were samples received within method-specific holding times?	☑	☐	☐

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-4 SB88992-01	03-218836	Ground Water	07-May-14 00:00	07-May-14

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260													
Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.70	1	SW846 8260C	08-May-14	09-May-14	JEG	1410310	
67-64-1	Acetone	< 10.0		µg/l	10.0	3.61	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	
71-43-2	Benzene	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.30	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	
74-83-9	Bromomethane	< 2.00		µg/l	2.00	0.46	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	3.11	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.41	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.41	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.37	1	"	"	"	"	"	
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	0.75	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.43	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	
75-00-3	Chloroethane	< 2.00		µg/l	2.00	0.71	1	"	"	"	"	"	
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.47	1	"	"	"	"	"	
74-87-3	Chloromethane	< 2.00		µg/l	2.00	0.50	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.43	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.34	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	0.49	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.42	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.43	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.39	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.47	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.65	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.28	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.30	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.47	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.46	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.20	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.40	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.40	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.47	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.42	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.44	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	2.02	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-4 SB88992-01	03-218836	Ground Water	07-May-14 00:00	07-May-14

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260													
Prepared by method SW846 5030 Water MS													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.47	1	SW846 8260C	08-May-14	09-May-14	JEG	1410310	
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.37	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.47	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.49	1	"	"	"	"	"	
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.54	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.43	1	"	"	"	"	"	
100-42-5	Styrene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.43	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.57	1	"	"	"	"	"	
108-88-3	Toluene	< 1.00		µg/l	1.00	0.28	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.42	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.44	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.29	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.33	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.39	1	"	"	"	"	"	
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.97	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	0.42	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	0.77	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.48	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.30	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.43	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.31	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.89	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	9.95	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.97	1	"	"	"	"	"	
64-17-5	Ethanol	< 400		µg/l	400	80.8	1	"	"	"	"	"	
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*99*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*101*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*106*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*101*			*70-130 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds													
Prepared by method SW846 3510C													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-4 SB88992-01	03-218836	Ground Water	07-May-14 00:00	07-May-14

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds													
Prepared by method SW846 3510C													
83-32-9	Acenaphthene	< 5.26		µg/l	5.26	0.947	1	SW846 8270D	08-May-14	08-May-14	MSL	1410273	
208-96-8	Acenaphthylene	< 5.26		µg/l	5.26	0.916	1	"	"	"	"	"	
62-53-3	Aniline	< 5.26		µg/l	5.26	0.663	1	"	"	"	"	"	
120-12-7	Anthracene	< 5.26		µg/l	5.26	0.947	1	"	"	"	"	"	
103-33-3	Azobenzene/Diphenyldiazene	< 5.26		µg/l	5.26	0.789	1	"	"	"	"	"	
92-87-5	Benzidine	< 5.26		µg/l	5.26	4.60	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	< 5.26		µg/l	5.26	1.25	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	< 5.26		µg/l	5.26	0.916	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	< 5.26		µg/l	5.26	0.895	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	< 5.26		µg/l	5.26	0.947	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	< 5.26		µg/l	5.26	1.17	1	"	"	"	"	"	
65-85-0	Benzoic acid	< 5.26		µg/l	5.26	2.28	1	"	"	"	"	"	
100-51-6	Benzyl alcohol	< 5.26		µg/l	5.26	0.979	1	"	"	"	"	"	
111-91-1	Bis(2-chloroethoxy)methane	< 5.26		µg/l	5.26	0.737	1	"	"	"	"	"	
111-44-4	Bis(2-chloroethyl)ether	< 5.26		µg/l	5.26	0.884	1	"	"	"	"	"	
108-60-1	Bis(2-chloroisopropyl)ether	< 5.26		µg/l	5.26	1.03	1	"	"	"	"	"	
117-81-7	Bis(2-ethylhexyl)phthalate	< 5.26		µg/l	5.26	1.07	1	"	"	"	"	"	
101-55-3	4-Bromophenyl phenyl ether	< 5.26		µg/l	5.26	0.895	1	"	"	"	"	"	
85-68-7	Butyl benzyl phthalate	< 5.26		µg/l	5.26	1.08	1	"	"	"	"	"	
86-74-8	Carbazole	< 5.26		µg/l	5.26	3.38	1	"	"	"	"	"	
59-50-7	4-Chloro-3-methylphenol	< 5.26		µg/l	5.26	1.00	1	"	"	"	"	"	
106-47-8	4-Chloroaniline	< 5.26		µg/l	5.26	0.589	1	"	"	"	"	"	
91-58-7	2-Chloronaphthalene	< 5.26		µg/l	5.26	0.916	1	"	"	"	"	"	
95-57-8	2-Chlorophenol	< 5.26		µg/l	5.26	1.01	1	"	"	"	"	"	
7005-72-3	4-Chlorophenyl phenyl ether	< 5.26		µg/l	5.26	0.937	1	"	"	"	"	"	
218-01-9	Chrysene	< 5.26		µg/l	5.26	1.20	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	< 5.26		µg/l	5.26	0.979	1	"	"	"	"	"	
132-64-9	Dibenzofuran	< 5.26		µg/l	5.26	0.926	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5.26		µg/l	5.26	1.03	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5.26		µg/l	5.26	1.01	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5.26		µg/l	5.26	1.05	1	"	"	"	"	"	
91-94-1	3,3´-Dichlorobenzidine	< 5.26		µg/l	5.26	0.716	1	"	"	"	"	"	
120-83-2	2,4-Dichlorophenol	< 5.26		µg/l	5.26	0.863	1	"	"	"	"	"	
84-66-2	Diethyl phthalate	< 5.26		µg/l	5.26	0.905	1	"	"	"	"	"	
131-11-3	Dimethyl phthalate	< 5.26		µg/l	5.26	0.958	1	"	"	"	"	"	
105-67-9	2,4-Dimethylphenol	< 5.26		µg/l	5.26	0.853	1	"	"	"	"	"	
84-74-2	Di-n-butyl phthalate	< 5.26		µg/l	5.26	0.989	1	"	"	"	"	"	
534-52-1	4,6-Dinitro-2-methylphenol	< 5.26		µg/l	5.26	0.705	1	"	"	"	"	"	
51-28-5	2,4-Dinitrophenol	< 5.26		µg/l	5.26	3.02	1	"	"	"	"	"	
121-14-2	2,4-Dinitrotoluene	< 5.26		µg/l	5.26	0.989	1	"	"	"	"	"	
606-20-2	2,6-Dinitrotoluene	< 5.26		µg/l	5.26	0.989	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-4	03-218836	Ground Water	07-May-14 00:00	07-May-14
SB88992-01				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds													
Prepared by method SW846 3510C													
117-84-0	Di-n-octyl phthalate	< 5.26		µg/l	5.26	0.821	1	SW846 8270D	08-May-14	08-May-14	MSL	1410273	
206-44-0	Fluoranthene	< 5.26		µg/l	5.26	1.01	1	"	"	"	"	"	
86-73-7	Fluorene	< 5.26		µg/l	5.26	0.947	1	"	"	"	"	"	
118-74-1	Hexachlorobenzene	< 5.26		µg/l	5.26	0.979	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 5.26		µg/l	5.26	0.874	1	"	"	"	"	"	
77-47-4	Hexachlorocyclopentadiene	< 5.26		µg/l	5.26	4.97	1	"	"	"	"	"	
67-72-1	Hexachloroethane	< 5.26		µg/l	5.26	1.06	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	< 5.26		µg/l	5.26	0.968	1	"	"	"	"	"	
78-59-1	Isophorone	< 5.26		µg/l	5.26	0.874	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	< 5.26		µg/l	5.26	0.958	1	"	"	"	"	"	
95-48-7	2-Methylphenol	< 5.26		µg/l	5.26	1.01	1	"	"	"	"	"	
108-39-4, 106-44-5	3 & 4-Methylphenol	< 10.5		µg/l	10.5	0.989	1	"	"	"	"	"	
91-20-3	Naphthalene	< 5.26		µg/l	5.26	0.937	1	"	"	"	"	"	
88-74-4	2-Nitroaniline	< 5.26		µg/l	5.26	0.863	1	"	"	"	"	"	
99-09-2	3-Nitroaniline	< 5.26		µg/l	5.26	0.674	1	"	"	"	"	"	
100-01-6	4-Nitroaniline	< 21.1		µg/l	21.1	0.758	1	"	"	"	"	"	
98-95-3	Nitrobenzene	< 5.26		µg/l	5.26	1.00	1	"	"	"	"	"	
88-75-5	2-Nitrophenol	< 5.26		µg/l	5.26	1.08	1	"	"	"	"	"	
100-02-7	4-Nitrophenol	< 21.1		µg/l	21.1	2.94	1	"	"	"	"	"	
62-75-9	N-Nitrosodimethylamine	< 5.26		µg/l	5.26	1.06	1	"	"	"	"	"	
621-64-7	N-Nitrosodi-n-propylamine	< 5.26		µg/l	5.26	0.968	1	"	"	"	"	"	
86-30-6	N-Nitrosodiphenylamine	< 5.26		µg/l	5.26	1.01	1	"	"	"	"	"	
87-86-5	Pentachlorophenol	< 21.1		µg/l	21.1	0.853	1	"	"	"	"	"	
85-01-8	Phenanthrene	< 5.26		µg/l	5.26	0.916	1	"	"	"	"	"	
108-95-2	Phenol	< 5.26		µg/l	5.26	1.00	1	"	"	"	"	"	
129-00-0	Pyrene	< 5.26		µg/l	5.26	1.35	1	"	"	"	"	"	
110-86-1	Pyridine	< 5.26		µg/l	5.26	1.02	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 5.26		µg/l	5.26	0.968	1	"	"	"	"	"	
90-12-0	1-Methylnaphthalene	< 5.26		µg/l	5.26	0.979	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 5.26		µg/l	5.26	0.874	1	"	"	"	"	"	
88-06-2	2,4,6-Trichlorophenol	< 5.26		µg/l	5.26	0.821	1	"	"	"	"	"	
82-68-8	Pentachloronitrobenzene	< 5.26		µg/l	5.26	0.958	1	"	"	"	"	"	
95-94-3	1,2,4,5-Tetrachlorobenzene	< 5.26		µg/l	5.26	1.01	1	"	"	"	"	"	
Surrogate recoveries:													
321-60-8	*2-Fluorobiphenyl*	*35*			*30-130 %*			"	"	"	"	"	
367-12-4	*2-Fluorophenol*	*26*			*15-110 %*			"	"	"	"	"	
4165-60-0	*Nitrobenzene-d5*	*42*			*30-130 %*			"	"	"	"	"	
4165-62-2	*Phenol-d5*	*16*			*15-110 %*			"	"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*39*			*30-130 %*			"	"	"	"	"	
118-79-6	*2,4,6-Tribromophenol*	*46*			*15-110 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GC													
Polychlorinated Biphenyls													
Prepared by method SW846 3510C													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-4 SB88992-01	03-218836	Ground Water	07-May-14 00:00	07-May-14

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GC													
Polychlorinated Biphenyls													
Prepared by method SW846 3510C													
12674-11-2	Aroclor-1016	< 0.233		µg/l	0.233	0.141	1	SW846 8082A	08-May-14	09-May-14	IMR	1410272	
11104-28-2	Aroclor-1221	< 0.233		µg/l	0.233	0.178	1	"	"	"	"	"	
11141-16-5	Aroclor-1232	< 0.233		µg/l	0.233	0.156	1	"	"	"	"	"	
53469-21-9	Aroclor-1242	< 0.233		µg/l	0.233	0.136	1	"	"	"	"	"	
12672-29-6	Aroclor-1248	< 0.233		µg/l	0.233	0.114	1	"	"	"	"	"	
11097-69-1	Aroclor-1254	< 0.233		µg/l	0.233	0.143	1	"	"	"	"	"	
11096-82-5	Aroclor-1260	< 0.233		µg/l	0.233	0.143	1	"	"	"	"	"	
37324-23-5	Aroclor-1262	< 0.233		µg/l	0.233	0.128	1	"	"	"	"	"	
11100-14-4	Aroclor-1268	< 0.233		µg/l	0.233	0.108	1	"	"	"	"	"	
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*60*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*60*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*45*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*45*			*30-150 %*			"	"	"	"	"	
Extractable Petroleum Hydrocarbons													
Fingerprinting by GC													
Prepared by method SW846 3510C													
8006-61-9	Gasoline	< 0.2		mg/l	0.2	0.1	1	SW846 8100Mod.	08-May-14	08-May-14	SEP	1410274	
68476-30-2	Fuel Oil #2	< 0.2		mg/l	0.2	0.1	1	"	"	"	"	"	
68476-31-3	Fuel Oil #4	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
68553-00-4	Fuel Oil #6	< 0.2		mg/l	0.2	0.2	1	"	"	"	"	"	
M09800000	Motor Oil	< 0.2		mg/l	0.2	0.2	1	"	"	"	"	"	
8032-32-4	Ligroin	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
J00100000	Aviation Fuel	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Hydraulic Oil	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
	Dielectric Fluid	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Unidentified	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Other Oil	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
Surrogate recoveries:													
3386-33-2	*1-Chlorooctadecane*	*67*			*40-140 %*			"	"	"	"	"	
Total Metals by EPA 200/6000 Series Methods													
	Preservation	**Field Preserved**		N/A			1	EPA 200/6000 methods			SMR	1410216	
Total Metals by EPA 6000/7000 Series Methods													
7440-22-4	Silver	< 0.0050		mg/l	0.0050	0.0011	1	SW846 6010C	08-May-14	08-May-14	ARF	1410237	
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0019	1	"	"	"	"	"	
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0012	1	"	"	"	"	"	
7440-47-3	Chromium	**0.0057**		mg/l	0.0050	0.0014	1	"	"	"	"	"	
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0022	1	"	"	"	"	"	
7439-89-6	Iron	**0.128**		mg/l	0.0150	0.0122	1	"	"	"	"	"	
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0014	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-4 SB88992-01	03-218836	Ground Water	07-May-14 00:00	07-May-14

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Total Metals by EPA 6000/7000 Series Methods													
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0032	1	SW846 6010C	08-May-14	08-May-14	ARF	1410237	
7440-36-0	Antimony	< 0.0060		mg/l	0.0060	0.0022	1	"	"	"	"	"	
7782-49-2	Selenium	< 0.0150		mg/l	0.0150	0.0067	1	"	"	"	"	"	
7440-66-6	Zinc	**0.0060**		mg/l	0.0050	0.0024	1	"	"	"	"	"	
Total Metals by EPA 200 Series Methods													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.00008	1	EPA 245.1/7470A	08-May-14	09-May-14	LR	1410238	X
General Chemistry Parameters													
16065-83-1	Trivalent Chromium	< 0.0100		mg/l	0.0100	0.0053	1	Calculation	08-May-14	08-May-14	ARF	1410237	
7782-50-5	Total Residual Chlorine	< 0.020	HT3,ClH T	mg/l	0.020	0.006	1	SM4500-Cl-G	07-May-14 18:53	07-May-14 19:11	TD/CA	1410258	X
16887-00-6	Chloride	**391**	D, GS1	mg/l	22.0	6.49	22	EPA 300.0	08-May-14	08-May-14	CAW	1410244	X
18540-29-9	Hexavalent Chromium	< 0.005		mg/l	0.005	0.003	1	SM3500-Cr-B/7196 A	07-May-14 18:54	07-May-14 19:28	TD/CA	1410259	
57-12-5	Cyanide (total)	**0.00930**		mg/l	0.00500	0.00419	1	EPA 335.4 / SW846 9012B	08-May-14	09-May-14	RLT	1410313	X
	Total Suspended Solids	< 5.0		mg/l	5.0	2.2	1	SM2540D	08-May-14	09-May-14	CMB	1410300	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-5	03-218836	Ground Water	07-May-14 00:00	07-May-14
SB88992-02				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260													
Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.70	1	SW846 8260C	08-May-14	09-May-14	JEG	1410310	
67-64-1	Acetone	< 10.0		µg/l	10.0	3.61	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	
71-43-2	Benzene	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.30	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	
74-83-9	Bromomethane	< 2.00		µg/l	2.00	0.46	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	3.11	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.41	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.41	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.37	1	"	"	"	"	"	
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	0.75	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.43	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	
75-00-3	Chloroethane	< 2.00		µg/l	2.00	0.71	1	"	"	"	"	"	
67-66-3	Chloroform	**1.14**		µg/l	1.00	0.47	1	"	"	"	"	"	
74-87-3	Chloromethane	< 2.00		µg/l	2.00	0.50	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.43	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.34	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	0.49	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.42	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.43	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.39	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.47	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.65	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.28	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	**1.06**		µg/l	1.00	0.30	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.47	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.46	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.20	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.40	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.40	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.47	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.42	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.44	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	2.02	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-5	03-218836	Ground Water	07-May-14 00:00	07-May-14
SB88992-02				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260													
Prepared by method SW846 5030 Water MS													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.47	1	SW846 8260C	08-May-14	09-May-14	JEG	1410310	
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.37	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.47	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.49	1	"	"	"	"	"	
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.54	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.43	1	"	"	"	"	"	
100-42-5	Styrene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.43	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.57	1	"	"	"	"	"	
108-88-3	Toluene	< 1.00		µg/l	1.00	0.28	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.42	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.44	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.29	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.33	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.39	1	"	"	"	"	"	
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.97	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	0.42	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	0.77	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.48	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.30	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.43	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.31	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.89	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	9.95	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.97	1	"	"	"	"	"	
64-17-5	Ethanol	< 400		µg/l	400	80.8	1	"	"	"	"	"	
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*102*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*100*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*104*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*102*			*70-130 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds													
Prepared by method SW846 3510C													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-5	03-218836	Ground Water	07-May-14 00:00	07-May-14
SB88992-02				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds													
Prepared by method SW846 3510C													
83-32-9	Acenaphthene	< 5.43		µg/l	5.43	0.978	1	SW846 8270D	08-May-14	08-May-14	MSL	1410273	
208-96-8	Acenaphthylene	< 5.43		µg/l	5.43	0.946	1	"	"	"	"	"	
62-53-3	Aniline	< 5.43		µg/l	5.43	0.685	1	"	"	"	"	"	
120-12-7	Anthracene	< 5.43		µg/l	5.43	0.978	1	"	"	"	"	"	
103-33-3	Azobenzene/Diphenyldiazene	< 5.43		µg/l	5.43	0.815	1	"	"	"	"	"	
92-87-5	Benzidine	< 5.43		µg/l	5.43	4.75	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	< 5.43		µg/l	5.43	1.29	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	< 5.43		µg/l	5.43	0.946	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	< 5.43		µg/l	5.43	0.924	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	< 5.43		µg/l	5.43	0.978	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	< 5.43		µg/l	5.43	1.21	1	"	"	"	"	"	
65-85-0	Benzoic acid	< 5.43		µg/l	5.43	2.36	1	"	"	"	"	"	
100-51-6	Benzyl alcohol	< 5.43		µg/l	5.43	1.01	1	"	"	"	"	"	
111-91-1	Bis(2-chloroethoxy)methane	< 5.43		µg/l	5.43	0.761	1	"	"	"	"	"	
111-44-4	Bis(2-chloroethyl)ether	< 5.43		µg/l	5.43	0.913	1	"	"	"	"	"	
108-60-1	Bis(2-chloroisopropyl)ether	< 5.43		µg/l	5.43	1.07	1	"	"	"	"	"	
117-81-7	Bis(2-ethylhexyl)phthalate	< 5.43		µg/l	5.43	1.11	1	"	"	"	"	"	
101-55-3	4-Bromophenyl phenyl ether	< 5.43		µg/l	5.43	0.924	1	"	"	"	"	"	
85-68-7	Butyl benzyl phthalate	< 5.43		µg/l	5.43	1.12	1	"	"	"	"	"	
86-74-8	Carbazole	< 5.43		µg/l	5.43	3.49	1	"	"	"	"	"	
59-50-7	4-Chloro-3-methylphenol	< 5.43		µg/l	5.43	1.03	1	"	"	"	"	"	
106-47-8	4-Chloroaniline	< 5.43		µg/l	5.43	0.609	1	"	"	"	"	"	
91-58-7	2-Chloronaphthalene	< 5.43		µg/l	5.43	0.946	1	"	"	"	"	"	
95-57-8	2-Chlorophenol	< 5.43		µg/l	5.43	1.04	1	"	"	"	"	"	
7005-72-3	4-Chlorophenyl phenyl ether	< 5.43		µg/l	5.43	0.967	1	"	"	"	"	"	
218-01-9	Chrysene	< 5.43		µg/l	5.43	1.24	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	< 5.43		µg/l	5.43	1.01	1	"	"	"	"	"	
132-64-9	Dibenzofuran	< 5.43		µg/l	5.43	0.957	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5.43		µg/l	5.43	1.07	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5.43		µg/l	5.43	1.04	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5.43		µg/l	5.43	1.09	1	"	"	"	"	"	
91-94-1	3,3´-Dichlorobenzidine	< 5.43		µg/l	5.43	0.739	1	"	"	"	"	"	
120-83-2	2,4-Dichlorophenol	< 5.43		µg/l	5.43	0.891	1	"	"	"	"	"	
84-66-2	Diethyl phthalate	< 5.43		µg/l	5.43	0.935	1	"	"	"	"	"	
131-11-3	Dimethyl phthalate	< 5.43		µg/l	5.43	0.989	1	"	"	"	"	"	
105-67-9	2,4-Dimethylphenol	< 5.43		µg/l	5.43	0.880	1	"	"	"	"	"	
84-74-2	Di-n-butyl phthalate	< 5.43		µg/l	5.43	1.02	1	"	"	"	"	"	
534-52-1	4,6-Dinitro-2-methylphenol	< 5.43		µg/l	5.43	0.728	1	"	"	"	"	"	
51-28-5	2,4-Dinitrophenol	< 5.43		µg/l	5.43	3.12	1	"	"	"	"	"	
121-14-2	2,4-Dinitrotoluene	< 5.43		µg/l	5.43	1.02	1	"	"	"	"	"	
606-20-2	2,6-Dinitrotoluene	< 5.43		µg/l	5.43	1.02	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-5	03-218836	Ground Water	07-May-14 00:00	07-May-14
SB88992-02				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds													
Prepared by method SW846 3510C													
117-84-0	Di-n-octyl phthalate	< 5.43		µg/l	5.43	0.848	1	SW846 8270D	08-May-14	08-May-14	MSL	1410273	
206-44-0	Fluoranthene	< 5.43		µg/l	5.43	1.04	1	"	"	"	"	"	
86-73-7	Fluorene	< 5.43		µg/l	5.43	0.978	1	"	"	"	"	"	
118-74-1	Hexachlorobenzene	< 5.43		µg/l	5.43	1.01	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 5.43		µg/l	5.43	0.902	1	"	"	"	"	"	
77-47-4	Hexachlorocyclopentadiene	< 5.43		µg/l	5.43	5.13	1	"	"	"	"	"	
67-72-1	Hexachloroethane	< 5.43		µg/l	5.43	1.10	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	< 5.43		µg/l	5.43	1.00	1	"	"	"	"	"	
78-59-1	Isophorone	< 5.43		µg/l	5.43	0.902	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	< 5.43		µg/l	5.43	0.989	1	"	"	"	"	"	
95-48-7	2-Methylphenol	< 5.43		µg/l	5.43	1.04	1	"	"	"	"	"	
108-39-4, 106-44-5	3 & 4-Methylphenol	< 10.9		µg/l	10.9	1.02	1	"	"	"	"	"	
91-20-3	Naphthalene	< 5.43		µg/l	5.43	0.967	1	"	"	"	"	"	
88-74-4	2-Nitroaniline	< 5.43		µg/l	5.43	0.891	1	"	"	"	"	"	
99-09-2	3-Nitroaniline	< 5.43		µg/l	5.43	0.696	1	"	"	"	"	"	
100-01-6	4-Nitroaniline	< 21.7		µg/l	21.7	0.783	1	"	"	"	"	"	
98-95-3	Nitrobenzene	< 5.43		µg/l	5.43	1.03	1	"	"	"	"	"	
88-75-5	2-Nitrophenol	< 5.43		µg/l	5.43	1.12	1	"	"	"	"	"	
100-02-7	4-Nitrophenol	< 21.7		µg/l	21.7	3.03	1	"	"	"	"	"	
62-75-9	N-Nitrosodimethylamine	< 5.43		µg/l	5.43	1.10	1	"	"	"	"	"	
621-64-7	N-Nitrosodi-n-propylamine	< 5.43		µg/l	5.43	1.00	1	"	"	"	"	"	
86-30-6	N-Nitrosodiphenylamine	< 5.43		µg/l	5.43	1.04	1	"	"	"	"	"	
87-86-5	Pentachlorophenol	< 21.7		µg/l	21.7	0.880	1	"	"	"	"	"	
85-01-8	Phenanthrene	< 5.43		µg/l	5.43	0.946	1	"	"	"	"	"	
108-95-2	Phenol	< 5.43		µg/l	5.43	1.03	1	"	"	"	"	"	
129-00-0	Pyrene	< 5.43		µg/l	5.43	1.39	1	"	"	"	"	"	
110-86-1	Pyridine	< 5.43		µg/l	5.43	1.05	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 5.43		µg/l	5.43	1.00	1	"	"	"	"	"	
90-12-0	1-Methylnaphthalene	< 5.43		µg/l	5.43	1.01	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 5.43		µg/l	5.43	0.902	1	"	"	"	"	"	
88-06-2	2,4,6-Trichlorophenol	< 5.43		µg/l	5.43	0.848	1	"	"	"	"	"	
82-68-8	Pentachloronitrobenzene	< 5.43		µg/l	5.43	0.989	1	"	"	"	"	"	
95-94-3	1,2,4,5-Tetrachlorobenzene	< 5.43		µg/l	5.43	1.04	1	"	"	"	"	"	
Surrogate recoveries:													
321-60-8	*2-Fluorobiphenyl*	*72*			*30-130 %*			"	"	"	"	"	
367-12-4	*2-Fluorophenol*	*56*			*15-110 %*			"	"	"	"	"	
4165-60-0	*Nitrobenzene-d5*	*89*			*30-130 %*			"	"	"	"	"	
4165-62-2	*Phenol-d5*	*38*			*15-110 %*			"	"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*82*			*30-130 %*			"	"	"	"	"	
118-79-6	*2,4,6-Tribromophenol*	*92*			*15-110 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GC													
Polychlorinated Biphenyls													
Prepared by method SW846 3510C													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-5	03-218836	Ground Water	07-May-14 00:00	07-May-14
SB88992-02				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GC													
Polychlorinated Biphenyls													
Prepared by method SW846 3510C													
12674-11-2	Aroclor-1016	< 0.211		µg/l	0.211	0.127	1	SW846 8082A	08-May-14	09-May-14	IMR	1410272	
11104-28-2	Aroclor-1221	< 0.211		µg/l	0.211	0.161	1	"	"	"	"	"	
11141-16-5	Aroclor-1232	< 0.211		µg/l	0.211	0.141	1	"	"	"	"	"	
53469-21-9	Aroclor-1242	< 0.211		µg/l	0.211	0.123	1	"	"	"	"	"	
12672-29-6	Aroclor-1248	< 0.211		µg/l	0.211	0.103	1	"	"	"	"	"	
11097-69-1	Aroclor-1254	< 0.211		µg/l	0.211	0.129	1	"	"	"	"	"	
11096-82-5	Aroclor-1260	< 0.211		µg/l	0.211	0.129	1	"	"	"	"	"	
37324-23-5	Aroclor-1262	< 0.211		µg/l	0.211	0.116	1	"	"	"	"	"	
11100-14-4	Aroclor-1268	< 0.211		µg/l	0.211	0.0979	1	"	"	"	"	"	
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*55*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*55*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*45*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*45*			*30-150 %*			"	"	"	"	"	
Extractable Petroleum Hydrocarbons													
Fingerprinting by GC													
Prepared by method SW846 3510C													
8006-61-9	Gasoline	< 0.2		mg/l	0.2	0.1	1	SW846 8100Mod.	08-May-14	08-May-14	SEP	1410274	
68476-30-2	Fuel Oil #2	< 0.2		mg/l	0.2	0.1	1	"	"	"	"	"	
68476-31-3	Fuel Oil #4	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
68553-00-4	Fuel Oil #6	< 0.2		mg/l	0.2	0.2	1	"	"	"	"	"	
M09800000	Motor Oil	< 0.2		mg/l	0.2	0.2	1	"	"	"	"	"	
8032-32-4	Ligroin	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
J00100000	Aviation Fuel	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Hydraulic Oil	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
	Dielectric Fluid	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Unidentified	< 0.2		mg/l	0.2	0.05	1	"	"	"	"	"	
	Other Oil	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	< 0.2		mg/l	0.2	0.02	1	"	"	"	"	"	
Surrogate recoveries:													
3386-33-2	*1-Chlorooctadecane*	*49*			*40-140 %*			"	"	"	"	"	
Total Metals by EPA 200/6000 Series Methods													
	Preservation	**Field Preserved**		N/A			1	EPA 200/6000 methods			SMR	1410216	
Total Metals by EPA 6000/7000 Series Methods													
7440-22-4	Silver	**0.0192**		mg/l	0.0050	0.0011	1	SW846 6010C	08-May-14	08-May-14	ARF	1410237	
7440-38-2	Arsenic	**0.0141**		mg/l	0.0040	0.0019	1	"	"	"	"	"	
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0012	1	"	"	"	"	"	
7440-47-3	Chromium	**0.0100**		mg/l	0.0050	0.0014	1	"	"	"	"	"	
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0022	1	"	"	"	"	"	
7439-89-6	Iron	**1.53**		mg/l	0.0150	0.0122	1	"	"	"	"	"	
7440-02-0	Nickel	**0.0074**		mg/l	0.0050	0.0014	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-5 SB88992-02	03-218836	Ground Water	07-May-14 00:00	07-May-14

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Total Metals by EPA 6000/7000 Series Methods													
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0032	1	SW846 6010C	08-May-14	08-May-14	ARF	1410237	
7440-36-0	Antimony	< 0.0060		mg/l	0.0060	0.0022	1	"	"	"	"	"	
7782-49-2	Selenium	< 0.0150		mg/l	0.0150	0.0067	1	"	"	"	"	"	
7440-66-6	Zinc	**0.0118**		mg/l	0.0050	0.0024	1	"	"	"	"	"	
Total Metals by EPA 200 Series Methods													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.00008	1	EPA 245.1/7470A	08-May-14	09-May-14	LR	1410238	X
General Chemistry Parameters													
16065-83-1	Trivalent Chromium	**0.0100**		mg/l	0.0100	0.0053	1	Calculation	08-May-14	08-May-14	ARF	1410237	
7782-50-5	Total Residual Chlorine	**0.042**	HT3,ClH T	mg/l	0.020	0.006	1	SM4500-Cl-G	07-May-14 18:53	07-May-14 19:10	TD/CA	1410258	X
16887-00-6	Chloride	**253**	D, GS1	mg/l	9.00	2.66	9	EPA 300.0	08-May-14	08-May-14	CAW	1410244	X
18540-29-9	Hexavalent Chromium	< 0.005		mg/l	0.005	0.003	1	SM3500-Cr-B/7196 A	07-May-14 18:54	07-May-14 19:29	TD/CA	1410259	
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00419	1	EPA 335.4 / SW846 9012B	08-May-14	09-May-14	RLT	1410313	X
	Total Suspended Solids	**11.0**		mg/l	5.0	2.2	1	SM2540D	08-May-14	09-May-14	CMB	1410300	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-1 SB88992-03	03-218836	Ground Water	07-May-14 00:00	07-May-14

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Soluble Metals by EPA 200/6000 Series Methods													
	Filtration	**Field Filtered**		N/A			1	EPA 200.7/3005A/6010			BJW	1410215	
Soluble Metals by EPA 6000/7000 Series Methods													
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0032	1	SW846 6010C	07-May-14	09-May-14	BJW/A	1410239	

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1410310 - SW846 5030 Water MS										
Blank (1410310-BLK1)					Prepared & Analyzed: 08-May-14					
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00						
Acetone	< 10.0		µg/l	10.0						
Acrylonitrile	< 0.50		µg/l	0.50						
Benzene	< 1.00		µg/l	1.00						
Bromobenzene	< 1.00		µg/l	1.00						
Bromochloromethane	< 1.00		µg/l	1.00						
Bromodichloromethane	< 0.50		µg/l	0.50						
Bromoform	< 1.00		µg/l	1.00						
Bromomethane	< 2.00		µg/l	2.00						
2-Butanone (MEK)	< 10.0		µg/l	10.0						
n-Butylbenzene	< 1.00		µg/l	1.00						
sec-Butylbenzene	< 1.00		µg/l	1.00						
tert-Butylbenzene	< 1.00		µg/l	1.00						
Carbon disulfide	< 2.00		µg/l	2.00						
Carbon tetrachloride	< 1.00		µg/l	1.00						
Chlorobenzene	< 1.00		µg/l	1.00						
Chloroethane	< 2.00		µg/l	2.00						
Chloroform	< 1.00		µg/l	1.00						
Chloromethane	< 2.00		µg/l	2.00						
2-Chlorotoluene	< 1.00		µg/l	1.00						
4-Chlorotoluene	< 1.00		µg/l	1.00						
1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00						
Dibromochloromethane	< 0.50		µg/l	0.50						
1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50						
Dibromomethane	< 1.00		µg/l	1.00						
1,2-Dichlorobenzene	< 1.00		µg/l	1.00						
1,3-Dichlorobenzene	< 1.00		µg/l	1.00						
1,4-Dichlorobenzene	< 1.00		µg/l	1.00						
Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00						
1,1-Dichloroethane	< 1.00		µg/l	1.00						
1,2-Dichloroethane	< 1.00		µg/l	1.00						
1,1-Dichloroethene	< 1.00		µg/l	1.00						
cis-1,2-Dichloroethene	< 1.00		µg/l	1.00						
trans-1,2-Dichloroethene	< 1.00		µg/l	1.00						
1,2-Dichloropropane	< 1.00		µg/l	1.00						
1,3-Dichloropropane	< 1.00		µg/l	1.00						
2,2-Dichloropropane	< 1.00		µg/l	1.00						
1,1-Dichloropropene	< 1.00		µg/l	1.00						
cis-1,3-Dichloropropene	< 0.50		µg/l	0.50						
trans-1,3-Dichloropropene	< 0.50		µg/l	0.50						
Ethylbenzene	< 1.00		µg/l	1.00						
Hexachlorobutadiene	< 0.50		µg/l	0.50						
2-Hexanone (MBK)	< 10.0		µg/l	10.0						
Isopropylbenzene	< 1.00		µg/l	1.00						
4-Isopropyltoluene	< 1.00		µg/l	1.00						
Methyl tert-butyl ether	< 1.00		µg/l	1.00						
4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0						
Methylene chloride	< 2.00		µg/l	2.00						
Naphthalene	< 1.00		µg/l	1.00						
n-Propylbenzene	< 1.00		µg/l	1.00						
Styrene	< 1.00		µg/l	1.00						
1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1410310 - SW846 5030 Water MS										
Blank (1410310-BLK1)					Prepared & Analyzed: 08-May-14					
1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50						
Tetrachloroethene	< 1.00		µg/l	1.00						
Toluene	< 1.00		µg/l	1.00						
1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00						
1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00						
1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00						
1,1,1-Trichloroethane	< 1.00		µg/l	1.00						
1,1,2-Trichloroethane	< 1.00		µg/l	1.00						
Trichloroethene	< 1.00		µg/l	1.00						
Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00						
1,2,3-Trichloropropane	< 1.00		µg/l	1.00						
1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00						
1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00						
Vinyl chloride	< 1.00		µg/l	1.00						
m,p-Xylene	< 2.00		µg/l	2.00						
o-Xylene	< 1.00		µg/l	1.00						
Tetrahydrofuran	< 2.00		µg/l	2.00						
Ethyl ether	< 1.00		µg/l	1.00						
Tert-amyl methyl ether	< 1.00		µg/l	1.00						
Ethyl tert-butyl ether	< 1.00		µg/l	1.00						
Di-isopropyl ether	< 1.00		µg/l	1.00						
Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0						
1,4-Dioxane	< 20.0		µg/l	20.0						
trans-1,4-Dichloro-2-butene	< 5.00		µg/l	5.00						
Ethanol	< 400		µg/l	400						
Surrogate: 4-Bromofluorobenzene	*50.0*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: Toluene-d8	*50.2*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*52.6*		µg/l		*50.0*		*105*	*70-130*		
Surrogate: Dibromofluoromethane	*50.3*		µg/l		*50.0*		*101*	*70-130*		
LCS (1410310-BS1)					Prepared & Analyzed: 08-May-14					
1,1,2-Trichlorotrifluoroethane (Freon 113)	**21.9**		µg/l		20.0		110	70-130		
Acetone	**37.6**	QM9	µg/l		20.0		188	70-130		
Acrylonitrile	**22.5**		µg/l		20.0		113	70-130		
Benzene	**20.1**		µg/l		20.0		100	70-130		
Bromobenzene	**20.7**		µg/l		20.0		103	70-130		
Bromochloromethane	**21.3**		µg/l		20.0		106	70-130		
Bromodichloromethane	**21.0**		µg/l		20.0		105	70-130		
Bromoform	**22.6**		µg/l		20.0		113	70-130		
Bromomethane	**25.1**		µg/l		20.0		125	70-130		
2-Butanone (MEK)	**32.9**	QM9	µg/l		20.0		165	70-130		
n-Butylbenzene	**20.7**		µg/l		20.0		104	70-130		
sec-Butylbenzene	**22.1**		µg/l		20.0		111	70-130		
tert-Butylbenzene	**21.8**		µg/l		20.0		109	70-130		
Carbon disulfide	**20.7**		µg/l		20.0		103	70-130		
Carbon tetrachloride	**22.1**		µg/l		20.0		110	70-130		
Chlorobenzene	**19.9**		µg/l		20.0		100	70-130		
Chloroethane	**19.5**		µg/l		20.0		97	70-130		
Chloroform	**19.4**		µg/l		20.0		97	70-130		
Chloromethane	**18.7**		µg/l		20.0		94	70-130		
2-Chlorotoluene	**20.8**		µg/l		20.0		104	70-130		
4-Chlorotoluene	**20.8**		µg/l		20.0		104	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1410310 - SW846 5030 Water MS										
LCS (1410310-BS1)					Prepared & Analyzed: 08-May-14					
1,2-Dibromo-3-chloropropane	**21.8**		µg/l		20.0		109	70-130		
Dibromochloromethane	**21.7**		µg/l		20.0		108	70-130		
1,2-Dibromoethane (EDB)	**23.2**		µg/l		20.0		116	70-130		
Dibromomethane	**22.2**		µg/l		20.0		111	70-130		
1,2-Dichlorobenzene	**20.1**		µg/l		20.0		101	70-130		
1,3-Dichlorobenzene	**21.0**		µg/l		20.0		105	70-130		
1,4-Dichlorobenzene	**19.6**		µg/l		20.0		98	70-130		
Dichlorodifluoromethane (Freon12)	**21.7**		µg/l		20.0		108	70-130		
1,1-Dichloroethane	**18.4**		µg/l		20.0		92	70-130		
1,2-Dichloroethane	**21.3**		µg/l		20.0		106	70-130		
1,1-Dichloroethene	**21.2**		µg/l		20.0		106	70-130		
cis-1,2-Dichloroethene	**20.1**		µg/l		20.0		100	70-130		
trans-1,2-Dichloroethene	**18.8**		µg/l		20.0		94	70-130		
1,2-Dichloropropane	**20.3**		µg/l		20.0		102	70-130		
1,3-Dichloropropane	**21.0**		µg/l		20.0		105	70-130		
2,2-Dichloropropane	**20.4**		µg/l		20.0		102	70-130		
1,1-Dichloropropene	**20.6**		µg/l		20.0		103	70-130		
cis-1,3-Dichloropropene	**21.3**		µg/l		20.0		106	70-130		
trans-1,3-Dichloropropene	**21.2**		µg/l		20.0		106	70-130		
Ethylbenzene	**20.5**		µg/l		20.0		102	70-130		
Hexachlorobutadiene	**22.0**		µg/l		20.0		110	70-130		
2-Hexanone (MBK)	**28.7**		µg/l		20.0		144	70-130		
Isopropylbenzene	**21.0**		µg/l		20.0		105	70-130		
4-Isopropyltoluene	**20.8**		µg/l		20.0		104	70-130		
Methyl tert-butyl ether	**20.7**		µg/l		20.0		103	70-130		
4-Methyl-2-pentanone (MIBK)	**22.1**		µg/l		20.0		110	70-130		
Methylene chloride	**21.3**		µg/l		20.0		106	70-130		
Naphthalene	**20.6**		µg/l		20.0		103	70-130		
n-Propylbenzene	**21.5**		µg/l		20.0		107	70-130		
Styrene	**21.6**		µg/l		20.0		108	70-130		
1,1,1,2-Tetrachloroethane	**21.6**		µg/l		20.0		108	70-130		
1,1,2,2-Tetrachloroethane	**20.3**		µg/l		20.0		102	70-130		
Tetrachloroethene	**20.3**		µg/l		20.0		101	70-130		
Toluene	**20.2**		µg/l		20.0		101	70-130		
1,2,3-Trichlorobenzene	**21.8**		µg/l		20.0		109	70-130		
1,2,4-Trichlorobenzene	**21.2**		µg/l		20.0		106	70-130		
1,3,5-Trichlorobenzene	**20.9**		µg/l		20.0		104	70-130		
1,1,1-Trichloroethane	**21.3**		µg/l		20.0		106	70-130		
1,1,2-Trichloroethane	**20.7**		µg/l		20.0		103	70-130		
Trichloroethene	**20.8**		µg/l		20.0		104	70-130		
Trichlorofluoromethane (Freon 11)	**22.0**		µg/l		20.0		110	70-130		
1,2,3-Trichloropropane	**20.7**		µg/l		20.0		104	70-130		
1,2,4-Trimethylbenzene	**21.8**		µg/l		20.0		109	70-130		
1,3,5-Trimethylbenzene	**21.9**		µg/l		20.0		110	70-130		
Vinyl chloride	**23.7**		µg/l		20.0		118	70-130		
m,p-Xylene	**21.0**		µg/l		20.0		105	70-130		
o-Xylene	**21.0**		µg/l		20.0		105	70-130		
Tetrahydrofuran	**21.9**		µg/l		20.0		109	70-130		
Ethyl ether	**23.1**		µg/l		20.0		115	70-130		
Tert-amyl methyl ether	**21.0**		µg/l		20.0		105	70-130		
Ethyl tert-butyl ether	**21.5**		µg/l		20.0		107	70-130		
Di-isopropyl ether	**19.7**		µg/l		20.0		98	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1410310 - SW846 5030 Water MS										
LCS (1410310-BS1)						Prepared & Analyzed: 08-May-14				
Tert-Butanol / butyl alcohol	**217**		µg/l		200		109	70-130		
1,4-Dioxane	**229**		µg/l		200		115	70-130		
trans-1,4-Dichloro-2-butene	**19.8**		µg/l		20.0		99	70-130		
Ethanol	**442**		µg/l		400		111	70-130		
Surrogate: 4-Bromofluorobenzene	*50.7*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*50.5*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*52.4*		µg/l		*50.0*		*105*	*70-130*		
Surrogate: Dibromofluoromethane	*51.4*		µg/l		*50.0*		*103*	*70-130*		
LCS Dup (1410310-BSD1)						Prepared & Analyzed: 08-May-14				
1,1,2-Trichlorotrifluoroethane (Freon 113)	**22.3**		µg/l		20.0		111	70-130	2	20
Acetone	**20.9**	QR5	µg/l		20.0		105	70-130	57	20
Acrylonitrile	**21.0**		µg/l		20.0		105	70-130	7	20
Benzene	**20.1**		µg/l		20.0		100	70-130	0.1	20
Bromobenzene	**21.9**		µg/l		20.0		110	70-130	6	20
Bromochloromethane	**21.1**		µg/l		20.0		106	70-130	0.8	20
Bromodichloromethane	**21.1**		µg/l		20.0		106	70-130	0.7	20
Bromoform	**22.7**		µg/l		20.0		114	70-130	0.8	20
Bromomethane	**23.8**		µg/l		20.0		119	70-130	5	20
2-Butanone (MEK)	**21.6**	QR5	µg/l		20.0		108	70-130	42	20
n-Butylbenzene	**21.7**		µg/l		20.0		109	70-130	5	20
sec-Butylbenzene	**22.9**		µg/l		20.0		115	70-130	4	20
tert-Butylbenzene	**22.7**		µg/l		20.0		114	70-130	4	20
Carbon disulfide	**21.0**		µg/l		20.0		105	70-130	1	20
Carbon tetrachloride	**22.6**		µg/l		20.0		113	70-130	2	20
Chlorobenzene	**20.7**		µg/l		20.0		104	70-130	4	20
Chloroethane	**19.4**		µg/l		20.0		97	70-130	0.4	20
Chloroform	**19.8**		µg/l		20.0		99	70-130	2	20
Chloromethane	**18.9**		µg/l		20.0		94	70-130	0.9	20
2-Chlorotoluene	**21.7**		µg/l		20.0		109	70-130	4	20
4-Chlorotoluene	**21.8**		µg/l		20.0		109	70-130	5	20
1,2-Dibromo-3-chloropropane	**19.6**		µg/l		20.0		98	70-130	10	20
Dibromochloromethane	**22.0**		µg/l		20.0		110	70-130	2	20
1,2-Dibromoethane (EDB)	**22.0**		µg/l		20.0		110	70-130	5	20
Dibromomethane	**21.8**		µg/l		20.0		109	70-130	2	20
1,2-Dichlorobenzene	**20.8**		µg/l		20.0		104	70-130	3	20
1,3-Dichlorobenzene	**22.1**		µg/l		20.0		110	70-130	5	20
1,4-Dichlorobenzene	**19.8**		µg/l		20.0		99	70-130	1	20
Dichlorodifluoromethane (Freon12)	**21.5**		µg/l		20.0		107	70-130	1	20
1,1-Dichloroethane	**20.0**		µg/l		20.0		100	70-130	8	20
1,2-Dichloroethane	**20.6**		µg/l		20.0		103	70-130	3	20
1,1-Dichloroethene	**22.6**		µg/l		20.0		113	70-130	6	20
cis-1,2-Dichloroethene	**20.6**		µg/l		20.0		103	70-130	3	20
trans-1,2-Dichloroethene	**20.0**		µg/l		20.0		100	70-130	6	20
1,2-Dichloropropane	**19.9**		µg/l		20.0		100	70-130	2	20
1,3-Dichloropropane	**20.1**		µg/l		20.0		100	70-130	4	20
2,2-Dichloropropane	**21.1**		µg/l		20.0		106	70-130	3	20
1,1-Dichloropropene	**21.3**		µg/l		20.0		107	70-130	3	20
cis-1,3-Dichloropropene	**21.2**		µg/l		20.0		106	70-130	0.2	20
trans-1,3-Dichloropropene	**21.2**		µg/l		20.0		106	70-130	0.2	20
Ethylbenzene	**21.6**		µg/l		20.0		108	70-130	5	20
Hexachlorobutadiene	**23.4**		µg/l		20.0		117	70-130	6	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1410310 - SW846 5030 Water MS										
LCS Dup (1410310-BSD1)					Prepared & Analyzed: 08-May-14					
2-Hexanone (MBK)	**21.2**	QR2	µg/l		20.0		106	70-130	30	20
Isopropylbenzene	**21.6**		µg/l		20.0		108	70-130	3	20
4-Isopropyltoluene	**21.7**		µg/l		20.0		109	70-130	4	20
Methyl tert-butyl ether	**20.4**		µg/l		20.0		102	70-130	2	20
4-Methyl-2-pentanone (MIBK)	**19.7**		µg/l		20.0		98	70-130	11	20
Methylene chloride	**21.5**		µg/l		20.0		107	70-130	0.7	20
Naphthalene	**20.3**		µg/l		20.0		102	70-130	2	20
n-Propylbenzene	**22.2**		µg/l		20.0		111	70-130	3	20
Styrene	**22.5**		µg/l		20.0		112	70-130	4	20
1,1,1,2-Tetrachloroethane	**22.5**		µg/l		20.0		113	70-130	4	20
1,1,2,2-Tetrachloroethane	**20.1**		µg/l		20.0		101	70-130	0.9	20
Tetrachloroethene	**22.0**		µg/l		20.0		110	70-130	8	20
Toluene	**20.8**		µg/l		20.0		104	70-130	3	20
1,2,3-Trichlorobenzene	**22.4**		µg/l		20.0		112	70-130	2	20
1,2,4-Trichlorobenzene	**22.3**		µg/l		20.0		112	70-130	5	20
1,3,5-Trichlorobenzene	**22.3**		µg/l		20.0		112	70-130	7	20
1,1,1-Trichloroethane	**21.9**		µg/l		20.0		110	70-130	3	20
1,1,2-Trichloroethane	**20.3**		µg/l		20.0		101	70-130	2	20
Trichloroethene	**21.1**		µg/l		20.0		105	70-130	1	20
Trichlorofluoromethane (Freon 11)	**22.4**		µg/l		20.0		112	70-130	2	20
1,2,3-Trichloropropane	**20.3**		µg/l		20.0		101	70-130	2	20
1,2,4-Trimethylbenzene	**22.7**		µg/l		20.0		114	70-130	4	20
1,3,5-Trimethylbenzene	**22.9**		µg/l		20.0		114	70-130	4	20
Vinyl chloride	**23.1**		µg/l		20.0		116	70-130	2	20
m,p-Xylene	**22.0**		µg/l		20.0		110	70-130	5	20
o-Xylene	**22.1**		µg/l		20.0		111	70-130	5	20
Tetrahydrofuran	**19.4**		µg/l		20.0		97	70-130	12	20
Ethyl ether	**22.1**		µg/l		20.0		111	70-130	4	20
Tert-amyl methyl ether	**19.8**		µg/l		20.0		99	70-130	6	20
Ethyl tert-butyl ether	**20.7**		µg/l		20.0		104	70-130	4	20
Di-isopropyl ether	**19.6**		µg/l		20.0		98	70-130	0.7	20
Tert-Butanol / butyl alcohol	**198**		µg/l		200		99	70-130	9	20
1,4-Dioxane	**211**		µg/l		200		106	70-130	8	20
trans-1,4-Dichloro-2-butene	**18.8**		µg/l		20.0		94	70-130	5	20
Ethanol	**420**		µg/l		400		105	70-130	5	20
Surrogate: 4-Bromofluorobenzene	*51.3*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*50.3*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*51.1*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: Dibromofluoromethane	*50.9*		µg/l		*50.0*		*102*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1410273 - SW846 3510C										
Blank (1410273-BLK1)					Prepared & Analyzed: 08-May-14					
Acenaphthene	< 5.00		µg/l	5.00						
Acenaphthylene	< 5.00		µg/l	5.00						
Aniline	< 5.00		µg/l	5.00						
Anthracene	< 5.00		µg/l	5.00						
Azobenzene/Diphenyldiazene	< 5.00		µg/l	5.00						
Benzidine	< 5.00		µg/l	5.00						
Benzo (a) anthracene	< 5.00		µg/l	5.00						
Benzo (a) pyrene	< 5.00		µg/l	5.00						
Benzo (b) fluoranthene	< 5.00		µg/l	5.00						
Benzo (g,h,i) perylene	< 5.00		µg/l	5.00						
Benzo (k) fluoranthene	< 5.00		µg/l	5.00						
Benzoic acid	< 5.00		µg/l	5.00						
Benzyl alcohol	< 5.00		µg/l	5.00						
Bis(2-chloroethoxy)methane	< 5.00		µg/l	5.00						
Bis(2-chloroethyl)ether	< 5.00		µg/l	5.00						
Bis(2-chloroisopropyl)ether	< 5.00		µg/l	5.00						
Bis(2-ethylhexyl)phthalate	< 5.00		µg/l	5.00						
4-Bromophenyl phenyl ether	< 5.00		µg/l	5.00						
Butyl benzyl phthalate	< 5.00		µg/l	5.00						
Carbazole	< 5.00		µg/l	5.00						
4-Chloro-3-methylphenol	< 5.00		µg/l	5.00						
4-Chloroaniline	< 5.00		µg/l	5.00						
2-Chloronaphthalene	< 5.00		µg/l	5.00						
2-Chlorophenol	< 5.00		µg/l	5.00						
4-Chlorophenyl phenyl ether	< 5.00		µg/l	5.00						
Chrysene	< 5.00		µg/l	5.00						
Dibenzo (a,h) anthracene	< 5.00		µg/l	5.00						
Dibenzofuran	< 5.00		µg/l	5.00						
1,2-Dichlorobenzene	< 5.00		µg/l	5.00						
1,3-Dichlorobenzene	< 5.00		µg/l	5.00						
1,4-Dichlorobenzene	< 5.00		µg/l	5.00						
3,3´-Dichlorobenzidine	< 5.00		µg/l	5.00						
2,4-Dichlorophenol	< 5.00		µg/l	5.00						
Diethyl phthalate	< 5.00		µg/l	5.00						
Dimethyl phthalate	< 5.00		µg/l	5.00						
2,4-Dimethylphenol	< 5.00		µg/l	5.00						
Di-n-butyl phthalate	< 5.00		µg/l	5.00						
4,6-Dinitro-2-methylphenol	< 5.00		µg/l	5.00						
2,4-Dinitrophenol	< 5.00		µg/l	5.00						
2,4-Dinitrotoluene	< 5.00		µg/l	5.00						
2,6-Dinitrotoluene	< 5.00		µg/l	5.00						
Di-n-octyl phthalate	< 5.00		µg/l	5.00						
Fluoranthene	< 5.00		µg/l	5.00						
Fluorene	< 5.00		µg/l	5.00						
Hexachlorobenzene	< 5.00		µg/l	5.00						
Hexachlorobutadiene	< 5.00		µg/l	5.00						
Hexachlorocyclopentadiene	< 5.00		µg/l	5.00						
Hexachloroethane	< 5.00		µg/l	5.00						
Indeno (1,2,3-cd) pyrene	< 5.00		µg/l	5.00						
Isophorone	< 5.00		µg/l	5.00						
2-Methylnaphthalene	< 5.00		µg/l	5.00						
2-Methylphenol	< 5.00		µg/l	5.00						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1410273 - SW846 3510C										
Blank (1410273-BLK1)					Prepared & Analyzed: 08-May-14					
3 & 4-Methylphenol	< 10.0		µg/l	10.0						
Naphthalene	< 5.00		µg/l	5.00						
2-Nitroaniline	< 5.00		µg/l	5.00						
3-Nitroaniline	< 5.00		µg/l	5.00						
4-Nitroaniline	< 20.0		µg/l	20.0						
Nitrobenzene	< 5.00		µg/l	5.00						
2-Nitrophenol	< 5.00		µg/l	5.00						
4-Nitrophenol	< 20.0		µg/l	20.0						
N-Nitrosodimethylamine	< 5.00		µg/l	5.00						
N-Nitrosodi-n-propylamine	< 5.00		µg/l	5.00						
N-Nitrosodiphenylamine	< 5.00		µg/l	5.00						
Pentachlorophenol	< 20.0		µg/l	20.0						
Phenanthrene	< 5.00		µg/l	5.00						
Phenol	< 5.00		µg/l	5.00						
Pyrene	< 5.00		µg/l	5.00						
Pyridine	< 5.00		µg/l	5.00						
1,2,4-Trichlorobenzene	< 5.00		µg/l	5.00						
1-Methylnaphthalene	< 5.00		µg/l	5.00						
2,4,5-Trichlorophenol	< 5.00		µg/l	5.00						
2,4,6-Trichlorophenol	< 5.00		µg/l	5.00						
Pentachloronitrobenzene	< 5.00		µg/l	5.00						
1,2,4,5-Tetrachlorobenzene	< 5.00		µg/l	5.00						
Surrogate: 2-Fluorobiphenyl	*39.0*		µg/l		*50.0*		*78*	*30-130*		
Surrogate: 2-Fluorophenol	*27.3*		µg/l		*50.0*		*55*	*15-110*		
Surrogate: Nitrobenzene-d5	*43.8*		µg/l		*50.0*		*88*	*30-130*		
Surrogate: Phenol-d5	*19.1*		µg/l		*50.0*		*38*	*15-110*		
Surrogate: Terphenyl-dl4	*43.5*		µg/l		*50.0*		*87*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*42.6*		µg/l		*50.0*		*85*	*15-110*		
LCS (1410273-BS1)					Prepared & Analyzed: 08-May-14					
Acenaphthene	**40.6**		µg/l	5.00	50.0		81	40-140		
Acenaphthylene	**41.7**		µg/l	5.00	50.0		83	40-140		
Aniline	**35.8**		µg/l	5.00	50.0		72	40-140		
Anthracene	**44.0**		µg/l	5.00	50.0		88	40-140		
Azobenzene/Diphenyldiazene	**43.6**		µg/l	5.00	50.0		87	40-140		
Benzidine	**42.8**		µg/l	5.00	50.0		86	40-140		
Benzo (a) anthracene	**44.6**		µg/l	5.00	50.0		89	40-140		
Benzo (a) pyrene	**44.4**		µg/l	5.00	50.0		89	40-140		
Benzo (b) fluoranthene	**44.7**		µg/l	5.00	50.0		89	40-140		
Benzo (g,h,i) perylene	**45.9**		µg/l	5.00	50.0		92	40-140		
Benzo (k) fluoranthene	**41.7**		µg/l	5.00	50.0		83	40-140		
Benzoic acid	**31.2**		µg/l	5.00	50.0		62	30-130		
Benzyl alcohol	**36.4**		µg/l	5.00	50.0		73	40-140		
Bis(2-chloroethoxy)methane	**34.6**		µg/l	5.00	50.0		69	40-140		
Bis(2-chloroethyl)ether	**39.4**		µg/l	5.00	50.0		79	40-140		
Bis(2-chloroisopropyl)ether	**38.1**		µg/l	5.00	50.0		76	40-140		
Bis(2-ethylhexyl)phthalate	**47.2**		µg/l	5.00	50.0		94	40-140		
4-Bromophenyl phenyl ether	**43.0**		µg/l	5.00	50.0		86	40-140		
Butyl benzyl phthalate	**46.0**		µg/l	5.00	50.0		92	40-140		
Carbazole	**43.1**		µg/l	5.00	50.0		86	40-140		
4-Chloro-3-methylphenol	**44.1**		µg/l	5.00	50.0		88	30-130		
4-Chloroaniline	**41.2**		µg/l	5.00	50.0		82	40-140		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1410273 - SW846 3510C										
LCS (1410273-BS1)					Prepared & Analyzed: 08-May-14					
2-Chloronaphthalene	**40.8**		µg/l	5.00	50.0		82	40-140		
2-Chlorophenol	**41.6**		µg/l	5.00	50.0		83	30-130		
4-Chlorophenyl phenyl ether	**43.3**		µg/l	5.00	50.0		87	40-140		
Chrysene	**43.4**		µg/l	5.00	50.0		87	40-140		
Dibenzo (a,h) anthracene	**49.0**		µg/l	5.00	50.0		98	40-140		
Dibenzofuran	**40.9**		µg/l	5.00	50.0		82	40-140		
1,2-Dichlorobenzene	**34.9**		µg/l	5.00	50.0		70	40-140		
1,3-Dichlorobenzene	**31.5**		µg/l	5.00	50.0		63	40-140		
1,4-Dichlorobenzene	**32.7**		µg/l	5.00	50.0		65	40-140		
3,3´-Dichlorobenzidine	**37.0**		µg/l	5.00	50.0		74	40-140		
2,4-Dichlorophenol	**43.4**		µg/l	5.00	50.0		87	30-130		
Diethyl phthalate	**45.0**		µg/l	5.00	50.0		90	40-140		
Dimethyl phthalate	**42.5**		µg/l	5.00	50.0		85	40-140		
2,4-Dimethylphenol	**38.0**		µg/l	5.00	50.0		76	30-130		
Di-n-butyl phthalate	**44.5**		µg/l	5.00	50.0		89	40-140		
4,6-Dinitro-2-methylphenol	**66.9**	QC2	µg/l	5.00	50.0		134	30-130		
2,4-Dinitrophenol	**68.1**	QC2	µg/l	5.00	50.0		136	30-130		
2,4-Dinitrotoluene	**50.1**		µg/l	5.00	50.0		100	40-140		
2,6-Dinitrotoluene	**50.3**		µg/l	5.00	50.0		101	40-140		
Di-n-octyl phthalate	**40.9**		µg/l	5.00	50.0		82	40-140		
Fluoranthene	**44.6**		µg/l	5.00	50.0		89	40-140		
Fluorene	**44.3**		µg/l	5.00	50.0		89	40-140		
Hexachlorobenzene	**35.4**		µg/l	5.00	50.0		71	40-140		
Hexachlorobutadiene	**26.1**		µg/l	5.00	50.0		52	40-140		
Hexachlorocyclopentadiene	**39.2**		µg/l	5.00	50.0		78	40-140		
Hexachloroethane	**28.1**		µg/l	5.00	50.0		56	40-140		
Indeno (1,2,3-cd) pyrene	**51.7**		µg/l	5.00	50.0		103	40-140		
Isophorone	**41.4**		µg/l	5.00	50.0		83	40-140		
2-Methylnaphthalene	**37.3**		µg/l	5.00	50.0		75	40-140		
2-Methylphenol	**40.0**		µg/l	5.00	50.0		80	30-130		
3 & 4-Methylphenol	**38.4**		µg/l	10.0	50.0		77	30-130		
Naphthalene	**38.5**		µg/l	5.00	50.0		77	40-140		
2-Nitroaniline	**46.7**		µg/l	5.00	50.0		93	40-140		
3-Nitroaniline	**43.0**		µg/l	5.00	50.0		86	40-140		
4-Nitroaniline	**49.7**		µg/l	20.0	50.0		99	40-140		
Nitrobenzene	**42.2**		µg/l	5.00	50.0		84	40-140		
2-Nitrophenol	**46.7**		µg/l	5.00	50.0		93	30-130		
4-Nitrophenol	**20.4**		µg/l	20.0	50.0		41	30-130		
N-Nitrosodimethylamine	**22.8**		µg/l	5.00	50.0		46	40-140		
N-Nitrosodi-n-propylamine	**43.0**		µg/l	5.00	50.0		86	40-140		
N-Nitrosodiphenylamine	**45.6**		µg/l	5.00	50.0		91	40-140		
Pentachlorophenol	**53.2**		µg/l	20.0	50.0		106	30-130		
Phenanthrene	**42.8**		µg/l	5.00	50.0		86	40-140		
Phenol	**21.3**		µg/l	5.00	50.0		43	30-130		
Pyrene	**45.1**		µg/l	5.00	50.0		90	40-140		
Pyridine	**15.2**	QC2	µg/l	5.00	50.0		30	40-140		
1,2,4-Trichlorobenzene	**31.4**		µg/l	5.00	50.0		63	40-140		
1-Methylnaphthalene	**40.3**		µg/l	5.00	50.0		81	40-140		
2,4,5-Trichlorophenol	**48.7**		µg/l	5.00	50.0		97	30-130		
2,4,6-Trichlorophenol	**46.0**		µg/l	5.00	50.0		92	30-130		
Pentachloronitrobenzene	**43.2**		µg/l	5.00	50.0		86	40-140		
1,2,4,5-Tetrachlorobenzene	**38.4**		µg/l	5.00	50.0		77	40-140		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1410273 - SW846 3510C										
LCS (1410273-BS1)					Prepared & Analyzed: 08-May-14					
Surrogate: 2-Fluorobiphenyl	*37.3*		µg/l		*50.0*		*75*	*30-130*		
Surrogate: 2-Fluorophenol	*25.8*		µg/l		*50.0*		*52*	*15-110*		
Surrogate: Nitrobenzene-d5	*46.0*		µg/l		*50.0*		*92*	*30-130*		
Surrogate: Phenol-d5	*18.1*		µg/l		*50.0*		*36*	*15-110*		
Surrogate: Terphenyl-dl4	*43.5*		µg/l		*50.0*		*87*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*51.9*		µg/l		*50.0*		*104*	*15-110*		
LCS Dup (1410273-BSD1)					Prepared & Analyzed: 08-May-14					
Acenaphthene	**42.7**		µg/l	5.00	50.0		85	40-140	5	20
Acenaphthylene	**44.3**		µg/l	5.00	50.0		89	40-140	6	20
Aniline	**33.7**		µg/l	5.00	50.0		67	40-140	6	20
Anthracene	**45.5**		µg/l	5.00	50.0		91	40-140	3	20
Azobenzene/Diphenyldiazene	**42.8**		µg/l	5.00	50.0		86	40-140	2	20
Benzidine	**34.8**	QR2	µg/l	5.00	50.0		70	40-140	21	20
Benzo (a) anthracene	**45.1**		µg/l	5.00	50.0		90	40-140	1	20
Benzo (a) pyrene	**45.0**		µg/l	5.00	50.0		90	40-140	2	20
Benzo (b) fluoranthene	**46.7**		µg/l	5.00	50.0		93	40-140	4	20
Benzo (g,h,i) perylene	**42.9**		µg/l	5.00	50.0		86	40-140	7	20
Benzo (k) fluoranthene	**44.2**		µg/l	5.00	50.0		88	40-140	6	20
Benzoic acid	**29.4**		µg/l	5.00	50.0		59	30-130	6	20
Benzyl alcohol	**33.7**		µg/l	5.00	50.0		67	40-140	8	20
Bis(2-chloroethoxy)methane	**35.0**		µg/l	5.00	50.0		70	40-140	1	20
Bis(2-chloroethyl)ether	**38.6**		µg/l	5.00	50.0		77	40-140	2	20
Bis(2-chloroisopropyl)ether	**37.1**		µg/l	5.00	50.0		74	40-140	3	20
Bis(2-ethylhexyl)phthalate	**45.4**		µg/l	5.00	50.0		91	40-140	4	20
4-Bromophenyl phenyl ether	**45.4**		µg/l	5.00	50.0		91	40-140	6	20
Butyl benzyl phthalate	**45.0**		µg/l	5.00	50.0		90	40-140	2	20
Carbazole	**44.1**		µg/l	5.00	50.0		88	40-140	2	20
4-Chloro-3-methylphenol	**45.9**		µg/l	5.00	50.0		92	30-130	4	20
4-Chloroaniline	**38.2**		µg/l	5.00	50.0		76	40-140	8	20
2-Chloronaphthalene	**44.2**		µg/l	5.00	50.0		88	40-140	8	20
2-Chlorophenol	**40.7**		µg/l	5.00	50.0		81	30-130	2	20
4-Chlorophenyl phenyl ether	**43.4**		µg/l	5.00	50.0		87	40-140	0.1	20
Chrysene	**44.1**		µg/l	5.00	50.0		88	40-140	2	20
Dibenzo (a,h) anthracene	**44.3**		µg/l	5.00	50.0		89	40-140	10	20
Dibenzofuran	**42.6**		µg/l	5.00	50.0		85	40-140	4	20
1,2-Dichlorobenzene	**38.1**		µg/l	5.00	50.0		76	40-140	9	20
1,3-Dichlorobenzene	**36.6**		µg/l	5.00	50.0		73	40-140	15	20
1,4-Dichlorobenzene	**36.8**		µg/l	5.00	50.0		74	40-140	12	20
3,3´-Dichlorobenzidine	**34.7**		µg/l	5.00	50.0		69	40-140	6	20
2,4-Dichlorophenol	**44.4**		µg/l	5.00	50.0		89	30-130	2	20
Diethyl phthalate	**43.7**		µg/l	5.00	50.0		87	40-140	3	20
Dimethyl phthalate	**43.8**		µg/l	5.00	50.0		88	40-140	3	20
2,4-Dimethylphenol	**38.5**		µg/l	5.00	50.0		77	30-130	1	20
Di-n-butyl phthalate	**48.0**		µg/l	5.00	50.0		96	40-140	8	20
4,6-Dinitro-2-methylphenol	**66.9**	QC2	µg/l	5.00	50.0		134	30-130	0.1	20
2,4-Dinitrophenol	**68.7**	QC2	µg/l	5.00	50.0		137	30-130	0.9	20
2,4-Dinitrotoluene	**50.6**		µg/l	5.00	50.0		101	40-140	1	20
2,6-Dinitrotoluene	**53.3**		µg/l	5.00	50.0		107	40-140	6	20
Di-n-octyl phthalate	**44.6**		µg/l	5.00	50.0		89	40-140	9	20
Fluoranthene	**49.0**		µg/l	5.00	50.0		98	40-140	9	20
Fluorene	**43.7**		µg/l	5.00	50.0		87	40-140	2	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1410273 - SW846 3510C										
LCS Dup (1410273-BSD1)					Prepared & Analyzed: 08-May-14					
Hexachlorobenzene	**39.1**		µg/l	5.00	50.0		78	40-140	10	20
Hexachlorobutadiene	**34.6**	QR2	µg/l	5.00	50.0		69	40-140	28	20
Hexachlorocyclopentadiene	**48.6**	QR2	µg/l	5.00	50.0		97	40-140	21	20
Hexachloroethane	**37.5**	QR2	µg/l	5.00	50.0		75	40-140	29	20
Indeno (1,2,3-cd) pyrene	**47.8**		µg/l	5.00	50.0		96	40-140	8	20
Isophorone	**39.6**		µg/l	5.00	50.0		79	40-140	4	20
2-Methylnaphthalene	**42.8**		µg/l	5.00	50.0		86	40-140	14	20
2-Methylphenol	**38.7**		µg/l	5.00	50.0		77	30-130	3	20
3 & 4-Methylphenol	**36.5**		µg/l	10.0	50.0		73	30-130	5	20
Naphthalene	**39.8**		µg/l	5.00	50.0		80	40-140	3	20
2-Nitroaniline	**48.8**		µg/l	5.00	50.0		98	40-140	4	20
3-Nitroaniline	**42.6**		µg/l	5.00	50.0		85	40-140	1	20
4-Nitroaniline	**46.3**		µg/l	20.0	50.0		93	40-140	7	20
Nitrobenzene	**42.9**		µg/l	5.00	50.0		86	40-140	2	20
2-Nitrophenol	**50.0**		µg/l	5.00	50.0		100	30-130	7	20
4-Nitrophenol	**20.0**		µg/l	20.0	50.0		40	30-130	2	20
N-Nitrosodimethylamine	**22.3**		µg/l	5.00	50.0		45	40-140	2	20
N-Nitrosodi-n-propylamine	**41.0**		µg/l	5.00	50.0		82	40-140	5	20
N-Nitrosodiphenylamine	**47.0**		µg/l	5.00	50.0		94	40-140	3	20
Pentachlorophenol	**56.3**		µg/l	20.0	50.0		113	30-130	6	20
Phenanthrene	**43.8**		µg/l	5.00	50.0		88	40-140	3	20
Phenol	**20.6**		µg/l	5.00	50.0		41	30-130	4	20
Pyrene	**47.0**		µg/l	5.00	50.0		94	40-140	4	20
Pyridine	**14.8**	QC2	µg/l	5.00	50.0		30	40-140	3	20
1,2,4-Trichlorobenzene	**38.6**	QR2	µg/l	5.00	50.0		77	40-140	21	20
1-Methylnaphthalene	**45.4**		µg/l	5.00	50.0		91	40-140	12	20
2,4,5-Trichlorophenol	**50.7**		µg/l	5.00	50.0		101	30-130	4	20
2,4,6-Trichlorophenol	**47.0**		µg/l	5.00	50.0		94	30-130	2	20
Pentachloronitrobenzene	**46.8**		µg/l	5.00	50.0		94	40-140	8	20
1,2,4,5-Tetrachlorobenzene	**44.3**		µg/l	5.00	50.0		89	40-140	14	20
Surrogate: 2-Fluorobiphenyl	*38.8*		µg/l		*50.0*		*78*	*30-130*		
Surrogate: 2-Fluorophenol	*24.6*		µg/l		*50.0*		*49*	*15-110*		
Surrogate: Nitrobenzene-d5	*44.7*		µg/l		*50.0*		*89*	*30-130*		
Surrogate: Phenol-d5	*17.4*		µg/l		*50.0*		*35*	*15-110*		
Surrogate: Terphenyl-dl4	*43.6*		µg/l		*50.0*		*87*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*51.9*		µg/l		*50.0*		*104*	*15-110*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1410272 - SW846 3510C										
Blank (1410272-BLK1)					Prepared: 08-May-14 Analyzed: 09-May-14					
Aroclor-1016	< 0.200		µg/l	0.200						
Aroclor-1016 [2C]	< 0.200		µg/l	0.200						
Aroclor-1221	< 0.200		µg/l	0.200						
Aroclor-1221 [2C]	< 0.200		µg/l	0.200						
Aroclor-1232	< 0.200		µg/l	0.200						
Aroclor-1232 [2C]	< 0.200		µg/l	0.200						
Aroclor-1242	< 0.200		µg/l	0.200						
Aroclor-1242 [2C]	< 0.200		µg/l	0.200						
Aroclor-1248	< 0.200		µg/l	0.200						
Aroclor-1248 [2C]	< 0.200		µg/l	0.200						
Aroclor-1254	< 0.200		µg/l	0.200						
Aroclor-1254 [2C]	< 0.200		µg/l	0.200						
Aroclor-1260	< 0.200		µg/l	0.200						
Aroclor-1260 [2C]	< 0.200		µg/l	0.200						
Aroclor-1262	< 0.200		µg/l	0.200						
Aroclor-1262 [2C]	< 0.200		µg/l	0.200						
Aroclor-1268	< 0.200		µg/l	0.200						
Aroclor-1268 [2C]	< 0.200		µg/l	0.200						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	*0.190*		µg/l		*0.200*		*95*	*30-150*		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	*0.200*		µg/l		*0.200*		*100*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr)	*0.150*		µg/l		*0.200*		*75*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr) [2C]	*0.170*		µg/l		*0.200*		*85*	*30-150*		
LCS (1410272-BS1)					Prepared: 08-May-14 Analyzed: 09-May-14					
Aroclor-1016	**2.22**		µg/l	0.200	2.50		89	40-140		
Aroclor-1016 [2C]	**2.31**		µg/l	0.200	2.50		92	40-140		
Aroclor-1260	**2.06**		µg/l	0.200	2.50		82	40-140		
Aroclor-1260 [2C]	**1.95**		µg/l	0.200	2.50		78	40-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	*0.200*		µg/l		*0.200*		*100*	*30-150*		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	*0.200*		µg/l		*0.200*		*100*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr)	*0.160*		µg/l		*0.200*		*80*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr) [2C]	*0.160*		µg/l		*0.200*		*80*	*30-150*		
LCS Dup (1410272-BSD1)					Prepared: 08-May-14 Analyzed: 09-May-14					
Aroclor-1016	**2.18**		µg/l	0.200	2.50		87	40-140	2	20
Aroclor-1016 [2C]	**2.31**		µg/l	0.200	2.50		92	40-140	0	20
Aroclor-1260	**1.97**		µg/l	0.200	2.50		79	40-140	4	20
Aroclor-1260 [2C]	**1.97**		µg/l	0.200	2.50		79	40-140	1	20
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	*0.260*		µg/l		*0.200*		*130*	*30-150*		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	*0.200*		µg/l		*0.200*		*100*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr)	*0.150*		µg/l		*0.200*		*75*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr) [2C]	*0.150*		µg/l		*0.200*		*75*	*30-150*		

Extractable Petroleum Hydrocarbons - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1410274 - SW846 3510C										
Blank (1410274-BLK1)						Prepared & Analyzed: 08-May-14				
Gasoline	< 0.2		mg/l	0.2						
Fuel Oil #2	< 0.2		mg/l	0.2						
Fuel Oil #4	< 0.2		mg/l	0.2						
Fuel Oil #6	< 0.2		mg/l	0.2						
Motor Oil	< 0.2		mg/l	0.2						
Ligroin	< 0.2		mg/l	0.2						
Aviation Fuel	< 0.2		mg/l	0.2						
Hydraulic Oil	< 0.2		mg/l	0.2						
Dielectric Fluid	< 0.2		mg/l	0.2						
Unidentified	< 0.2		mg/l	0.2						
Other Oil	< 0.2		mg/l	0.2						
Total Petroleum Hydrocarbons	< 0.2		mg/l	0.2						
Surrogate: 1-Chlorooctadecane	*0.0271*		mg/l		*0.0500*		*54*	*40-140*		
LCS (1410274-BS2)						Prepared & Analyzed: 08-May-14				
Fuel Oil #2	**9.4**		mg/l	0.2	10.0		94	40-140		
Surrogate: 1-Chlorooctadecane	*0.0527*		mg/l		*0.0500*		*105*	*40-140*		
LCS Dup (1410274-BSD2)						Prepared & Analyzed: 08-May-14				
Fuel Oil #2	**9.2**		mg/l	0.2	10.0		92	40-140	2	200
Surrogate: 1-Chlorooctadecane	*0.0502*		mg/l		*0.0500*		*100*	*40-140*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1410237 - SW846 3005A										
Blank (1410237-BLK1)						Prepared & Analyzed: 08-May-14				
Iron	< 0.0150		mg/l	0.0150						
Zinc	< 0.0050		mg/l	0.0050						
Selenium	< 0.0150		mg/l	0.0150						
Antimony	< 0.0060		mg/l	0.0060						
Lead	< 0.0075		mg/l	0.0075						
Nickel	< 0.0050		mg/l	0.0050						
Copper	< 0.0050		mg/l	0.0050						
Chromium	< 0.0050		mg/l	0.0050						
Cadmium	< 0.0025		mg/l	0.0025						
Arsenic	< 0.0040		mg/l	0.0040						
Silver	< 0.0050		mg/l	0.0050						
LCS (1410237-BS1)						Prepared & Analyzed: 08-May-14				
Iron	**1.32**		mg/l	0.0150	1.25		105	85-115		
Zinc	**1.30**		mg/l	0.0050	1.25		104	85-115		
Arsenic	**1.25**		mg/l	0.0040	1.25		100	85-115		
Silver	**1.23**		mg/l	0.0050	1.25		99	85-115		
Chromium	**1.30**		mg/l	0.0050	1.25		104	85-115		
Copper	**1.31**		mg/l	0.0050	1.25		105	85-115		
Nickel	**1.27**		mg/l	0.0050	1.25		102	85-115		
Lead	**1.28**		mg/l	0.0075	1.25		102	85-115		
Antimony	**1.24**		mg/l	0.0060	1.25		99	85-115		
Selenium	**1.25**		mg/l	0.0150	1.25		100	85-115		
Cadmium	**1.30**		mg/l	0.0025	1.25		104	85-115		
LCS Dup (1410237-BSD1)						Prepared & Analyzed: 08-May-14				
Iron	**1.33**		mg/l	0.0150	1.25		106	85-115	0.5	20
Arsenic	**1.25**		mg/l	0.0040	1.25		100	85-115	0.3	20
Chromium	**1.30**		mg/l	0.0050	1.25		104	85-115	0.3	20
Zinc	**1.31**		mg/l	0.0050	1.25		104	85-115	0.2	20
Cadmium	**1.30**		mg/l	0.0025	1.25		104	85-115	0.2	20
Selenium	**1.26**		mg/l	0.0150	1.25		101	85-115	0.6	20
Antimony	**1.24**		mg/l	0.0060	1.25		99	85-115	0.08	20
Lead	**1.28**		mg/l	0.0075	1.25		103	85-115	0.2	20
Nickel	**1.27**		mg/l	0.0050	1.25		102	85-115	0.2	20
Silver	**1.22**		mg/l	0.0050	1.25		98	85-115	0.8	20
Copper	**1.31**		mg/l	0.0050	1.25		105	85-115	0.4	20
Duplicate (1410237-DUP1)			**Source: SB88992-01**			Prepared & Analyzed: 08-May-14				
Iron	**0.141**		mg/l	0.0150		0.128			10	20
Arsenic	< 0.0040		mg/l	0.0040		BRL				20
Zinc	**0.0055**		mg/l	0.0050		0.0060			9	20
Silver	< 0.0050		mg/l	0.0050		BRL				20
Cadmium	< 0.0025		mg/l	0.0025		BRL				20
Chromium	**0.0062**		mg/l	0.0050		0.0057			8	20
Copper	< 0.0050		mg/l	0.0050		BRL				20
Nickel	**0.0026**	J	mg/l	0.0050		0.0026			0	20
Lead	< 0.0075		mg/l	0.0075		BRL				20
Antimony	**0.0030**	J	mg/l	0.0060		BRL				20
Selenium	< 0.0150		mg/l	0.0150		BRL				20
Matrix Spike (1410237-MS1)			**Source: SB88992-01**			Prepared & Analyzed: 08-May-14				
Iron	**1.43**		mg/l	0.0150	1.25	0.128	104	75-125		
Nickel	**1.23**		mg/l	0.0050	1.25	0.0026	98	75-125		
Cadmium	**1.29**		mg/l	0.0025	1.25	BRL	103	75-125		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1410237 - SW846 3005A										
Matrix Spike (1410237-MS1)			**Source: SB88992-01**		Prepared & Analyzed: 08-May-14					
Selenium	**1.33**		mg/l	0.0150	1.25	BRL	106	75-125		
Lead	**1.23**		mg/l	0.0075	1.25	BRL	98	75-125		
Copper	**1.34**		mg/l	0.0050	1.25	BRL	107	75-125		
Chromium	**1.30**		mg/l	0.0050	1.25	0.0057	104	75-125		
Zinc	**1.30**		mg/l	0.0050	1.25	0.0060	104	75-125		
Silver	**1.28**		mg/l	0.0050	1.25	BRL	102	75-125		
Antimony	**1.32**		mg/l	0.0060	1.25	BRL	105	75-125		
Arsenic	**1.35**		mg/l	0.0040	1.25	BRL	108	75-125		
Matrix Spike Dup (1410237-MSD1)			**Source: SB88992-01**		Prepared & Analyzed: 08-May-14					
Iron	**1.44**		mg/l	0.0150	1.25	0.128	105	75-125	1	20
Zinc	**1.32**		mg/l	0.0050	1.25	0.0060	105	75-125	2	20
Selenium	**1.35**		mg/l	0.0150	1.25	BRL	108	75-125	1	20
Antimony	**1.33**		mg/l	0.0060	1.25	BRL	106	75-125	0.8	20
Nickel	**1.24**		mg/l	0.0050	1.25	0.0026	99	75-125	1	20
Copper	**1.33**		mg/l	0.0050	1.25	BRL	107	75-125	0.6	20
Chromium	**1.32**		mg/l	0.0050	1.25	0.0057	105	75-125	1	20
Cadmium	**1.31**		mg/l	0.0025	1.25	BRL	105	75-125	1	20
Silver	**1.31**		mg/l	0.0050	1.25	BRL	105	75-125	3	20
Arsenic	**1.38**		mg/l	0.0040	1.25	BRL	110	75-125	2	20
Lead	**1.24**		mg/l	0.0075	1.25	BRL	99	75-125	1	20
Post Spike (1410237-PS1)			**Source: SB88992-01**		Prepared & Analyzed: 08-May-14					
Iron	**1.39**		mg/l	0.0150	1.25	0.128	101	80-120		
Silver	**1.24**		mg/l	0.0050	1.25	BRL	99	80-120		
Zinc	**1.29**		mg/l	0.0050	1.25	0.0060	103	80-120		
Selenium	**1.30**		mg/l	0.0150	1.25	BRL	104	80-120		
Antimony	**1.29**		mg/l	0.0060	1.25	BRL	103	80-120		
Lead	**1.22**		mg/l	0.0075	1.25	BRL	97	80-120		
Nickel	**1.22**		mg/l	0.0050	1.25	0.0026	97	80-120		
Copper	**1.33**		mg/l	0.0050	1.25	BRL	106	80-120		
Chromium	**1.29**		mg/l	0.0050	1.25	0.0057	103	80-120		
Arsenic	**1.31**		mg/l	0.0040	1.25	BRL	105	80-120		
Cadmium	**1.28**		mg/l	0.0025	1.25	BRL	102	80-120		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1410238 - EPA200/SW7000 Series										
Blank (1410238-BLK1)						Prepared: 08-May-14	Analyzed: 09-May-14			
Mercury	< 0.00020		mg/l	0.00020						
LCS (1410238-BS1)						Prepared: 08-May-14	Analyzed: 09-May-14			
Mercury	**0.00515**		mg/l	0.00020	0.00500		103	85-115		
Duplicate (1410238-DUP1)			**Source: SB88992-02**			Prepared: 08-May-14	Analyzed: 09-May-14			
Mercury	< 0.00020		mg/l	0.00020		BRL				20
Matrix Spike (1410238-MS1)			**Source: SB88992-02**			Prepared: 08-May-14	Analyzed: 09-May-14			
Mercury	**0.00491**		mg/l	0.00020	0.00500	BRL	98	80-120		
Matrix Spike Dup (1410238-MSD1)			**Source: SB88992-02**			Prepared: 08-May-14	Analyzed: 09-May-14			
Mercury	**0.00513**		mg/l	0.00020	0.00500	BRL	103	80-120	4	20
Post Spike (1410238-PS1)			**Source: SB88992-02**			Prepared: 08-May-14	Analyzed: 09-May-14			
Mercury	**0.00477**		mg/l	0.00020	0.00500	BRL	95	85-115		

Soluble Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1410239 - SW846 3005A										
Blank (1410239-BLK1)						Prepared: 07-May-14	Analyzed: 09-May-14			
Lead	< 0.0075		mg/l	0.0075						
LCS (1410239-BS1)						Prepared: 07-May-14	Analyzed: 09-May-14			
Lead	**1.27**		mg/l	0.0075	1.25		102	85-115		
LCS Dup (1410239-BSD1)						Prepared: 07-May-14	Analyzed: 09-May-14			
Lead	**1.27**		mg/l	0.0075	1.25		101	85-115	0.4	20
Duplicate (1410239-DUP1)			**Source: SB88992-03**			Prepared: 07-May-14	Analyzed: 09-May-14			
Lead	< 0.0075		mg/l	0.0075		BRL				20
Matrix Spike (1410239-MS1)			**Source: SB88992-03**			Prepared: 07-May-14	Analyzed: 09-May-14			
Lead	**1.25**		mg/l	0.0075	1.25	BRL	100	75-125		
Matrix Spike Dup (1410239-MSD1)			**Source: SB88992-03**			Prepared: 07-May-14	Analyzed: 09-May-14			
Lead	**1.21**		mg/l	0.0075	1.25	BRL	97	75-125	3	20
Post Spike (1410239-PS1)			**Source: SB88992-03**			Prepared: 07-May-14	Analyzed: 09-May-14			
Lead	**1.30**		mg/l	0.0075	1.25	BRL	104	80-120		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1410244 - General Preparation										
Blank (1410244-BLK1)					Prepared: 07-May-14 Analyzed: 08-May-14					
Chloride	< 1.00		mg/l	1.00						
LCS (1410244-BS1)					Prepared: 07-May-14 Analyzed: 08-May-14					
Chloride	**21.5**		mg/l	1.00	20.0		108	90-110		
Reference (1410244-SRM1)					Prepared: 07-May-14 Analyzed: 08-May-14					
Chloride	**26.5**		mg/l	1.00	25.0		106	90-110		
Batch 1410258 - General Preparation										
Blank (1410258-BLK1)					Prepared & Analyzed: 07-May-14					
Total Residual Chlorine	< 0.020		mg/l	0.020						
LCS (1410258-BS1)					Prepared & Analyzed: 07-May-14					
Total Residual Chlorine	**0.055**		mg/l	0.020	0.0500		109	90-110		
Calibration Blank (1410258-CCB1)					Prepared & Analyzed: 07-May-14					
Total Residual Chlorine	**0.004**		mg/l							
Calibration Blank (1410258-CCB2)					Prepared & Analyzed: 07-May-14					
Total Residual Chlorine	**-0.008**		mg/l							
Calibration Check (1410258-CCV1)					Prepared & Analyzed: 07-May-14					
Total Residual Chlorine	**0.053**		mg/l	0.020	0.0500		106	90-110		
Calibration Check (1410258-CCV2)					Prepared & Analyzed: 07-May-14					
Total Residual Chlorine	**0.051**		mg/l	0.020	0.0500		102	90-110		
Duplicate (1410258-DUP1)			**Source: SB88992-02**		Prepared & Analyzed: 07-May-14					
Total Residual Chlorine	**0.049**		mg/l	0.020		0.042			16	20
Matrix Spike (1410258-MS1)			**Source: SB88992-02**		Prepared & Analyzed: 07-May-14					
Total Residual Chlorine	**0.074**	QM9	mg/l	0.020	0.0500	0.042	65	80-120		
Matrix Spike Dup (1410258-MSD1)			**Source: SB88992-02**		Prepared & Analyzed: 07-May-14					
Total Residual Chlorine	**0.074**	QM9	mg/l	0.020	0.0500	0.042	65	80-120	0.3	200
Reference (1410258-SRM1)					Prepared & Analyzed: 07-May-14					
Total Residual Chlorine	**0.106**		mg/l	0.020	0.115		93	85-115		
Batch 1410259 - General Preparation										
Blank (1410259-BLK1)					Prepared & Analyzed: 07-May-14					
Hexavalent Chromium	< 0.005		mg/l	0.005						
LCS (1410259-BS1)					Prepared & Analyzed: 07-May-14					
Hexavalent Chromium	**0.052**		mg/l	0.005	0.0500		104	80-120		
Calibration Blank (1410259-CCB1)					Prepared & Analyzed: 07-May-14					
Hexavalent Chromium	**0.0001**		mg/l							
Calibration Blank (1410259-CCB2)					Prepared & Analyzed: 07-May-14					
Hexavalent Chromium	**-0.0006**		mg/l							
Calibration Check (1410259-CCV1)					Prepared & Analyzed: 07-May-14					
Hexavalent Chromium	**0.052**		mg/l	0.005	0.0500		104	90-110		
Calibration Check (1410259-CCV2)					Prepared & Analyzed: 07-May-14					
Hexavalent Chromium	**0.051**		mg/l	0.005	0.0500		102	90-110		
Duplicate (1410259-DUP1)			**Source: SB88992-02**		Prepared & Analyzed: 07-May-14					
Hexavalent Chromium	< 0.005		mg/l	0.005		BRL				20
Matrix Spike (1410259-MS1)			**Source: SB88992-02**		Prepared & Analyzed: 07-May-14					
Hexavalent Chromium	**0.054**		mg/l	0.005	0.0500	BRL	109	85-115		
Matrix Spike Dup (1410259-MSD1)			**Source: SB88992-02**		Prepared & Analyzed: 07-May-14					
Hexavalent Chromium	**0.055**		mg/l	0.005	0.0500	BRL	109	85-115	0.4	20
Reference (1410259-SRM1)					Prepared & Analyzed: 07-May-14					
Hexavalent Chromium	**0.026**		mg/l	0.005	0.0250		103	85-115		
Batch 1410300 - General Preparation										
Blank (1410300-BLK1)					Prepared: 08-May-14 Analyzed: 09-May-14					

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1410300 - General Preparation										
Blank (1410300-BLK1)						Prepared: 08-May-14	Analyzed: 09-May-14			
Total Suspended Solids	< 5.0		mg/l	5.0						
LCS (1410300-BS1)						Prepared: 08-May-14	Analyzed: 09-May-14			
Total Suspended Solids	**100**		mg/l	10.0	100		100	90-110		
Batch 1410313 - General Preparation										
Blank (1410313-BLK1)						Prepared: 08-May-14	Analyzed: 09-May-14			
Cyanide (total)	< 0.00500		mg/l	0.00500						
Blank (1410313-BLK2)						Prepared: 08-May-14	Analyzed: 09-May-14			
Cyanide (total)	< 0.00500		mg/l	0.00500						
LCS (1410313-BS1)						Prepared: 08-May-14	Analyzed: 09-May-14			
Cyanide (total)	**0.323**		mg/l	0.00500	0.300		108	90-110		
LCS (1410313-BS2)						Prepared: 08-May-14	Analyzed: 09-May-14			
Cyanide (total)	**0.306**		mg/l	0.00500	0.300		102	90-110		
Duplicate (1410313-DUP1)			**Source: SB88992-01**			Prepared: 08-May-14	Analyzed: 09-May-14			
Cyanide (total)	**0.00819**		mg/l	0.00500		0.00930			13	20
Matrix Spike (1410313-MS1)			**Source: SB88992-01**			Prepared: 08-May-14	Analyzed: 09-May-14			
Cyanide (total)	**0.315**		mg/l	0.00500	0.300	0.00930	102	90-110		
Matrix Spike Dup (1410313-MSD1)			**Source: SB88992-01**			Prepared: 08-May-14	Analyzed: 09-May-14			
Cyanide (total)	**0.324**		mg/l	0.00500	0.300	0.00930	105	90-110	3	20
Reference (1410313-SRM1)						Prepared: 08-May-14	Analyzed: 09-May-14			
Cyanide (total)	**0.242**		mg/l	0.00500	0.222		109	75-125		

Notes and Definitions

D	Data reported from a dilution
GS1	Sample dilution required for high concentration of target analytes to be within the instrument calibration range.
HT3	The collection time was not indicated on the chain of custody. Therefore, the analysis hold time can not be verified.
QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample.
QM9	The spike recovery for this QC sample is outside the established control limits. The sample results for the QC batch were accepted based on LCS/LCSD or SRM recoveries within the control limits.
QR2	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QR5	RPD out of acceptance range.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ClHT	The method for residual chlorine indicates that samples should be analyzed immediately. 40 CFR 136 specifies a holding time of 15 minutes from sampling to analysis. Therefore all aqueous residual chlorine samples not analyzed in the field are considered out of hold time at the time of sample receipt.

Interpretation of Total Petroleum Hydrocarbon Report

Petroleum identification is determined by comparing the GC fingerprint obtained from the sample with a library of GC fingerprints obtained from analyses of various petroleum products. Possible match categories are as follows:

Gasoline - includes regular, unleaded, premium, etc.
Fuel Oil #2 - includes home heating oil, #2 fuel oil, and diesel
Fuel Oil #4 - includes #4 fuel oil
Fuel Oil #6 - includes #6 fuel oil and bunker "C" oil
Motor Oil - includes virgin and waste automobile oil
Ligroin - includes mineral spirits, petroleum naphtha, vm&p naphtha
Aviation Fuel - includes kerosene, Jet A and JP-4
Other Oil - includes lubricating and cutting oil, and silicon oil

At times, the unidentified petroleum product is quantified using a calibration that most closely approximates the distribution of compounds in the sample. When this occurs, the result is qualified as Calculated as.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by:
June O'Connor
Nicole Leja

SB88992

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☑ Rush TAT - Date Needed: 5-9-14
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: ECS, Worcester

Telephone #: 774-272-2212

Project Mgr. Chuck Klinger

Invoice To:

P.O. No.: RQN: 7989

Project No.: D3-218836.

Site Name: City Square

Location: Worcester State: MA

Sampler(s): A. Kaczanka

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10= H_3PO_4 11= 12=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List preservative code below:

QA/QC Reporting Notes:
* additional charges may apply

MA DEP MCP CAM Report: Yes ☐ No ☐
CT DPH RCP Report: Yes ☐ No ☐

QA/QC Reporting Level
☐ Standard ☐ No QC ☐ DQA*
☐ NY ASP A* ☐ NY ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ TIER II* ☐ TIER IV*
☐ Other

State-specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TPH 1600	PCBs 8082	8260 (full w/ EDB, 1,4 dioxane)	8270 (full w/ total PAHs)	TSS, TRC	Cyanide, Chloride	total metals Sb, As, Ba, Cd, Cr, Cr VI, Cu, Pb, Hg, Ni, Se, Zn, Fe, Al	Dis. Pb (field filtered)	State-specific reporting standards
88992-01	ECS-4	5/7/14	PM	G	GW	3	3		4	X	X	X	X	X	X	X		
-02	ECS-5	↓	↓	↓	↓	3	3		4	X	X	X	X	X	X	X		
-03	ECS-1								1								X	
-04	B-304								1								X	

19/-1/09 IR02
MA472014→MW

Relinquished by:	Received by:	Date:	Time:	Temp°C
Aaron Kaczanka		5-7-14	1458	
	Mary Sullivan	5/7/2014	1651	0.9

☐ EDD Format
☐ E-mail to

Condition upon receipt:
☐ Ambient ☑ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

SB88992

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☑ Rush TAT - Date Needed: 5-9-14
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: ECS, Worcester

Telephone #: 774-272-2212

Project Mgr. Chuck Klinger

Invoice To:

P.O. No.: RQN: 7989

Project No.: 03-218836.

Site Name: City Square

Location: Worcester State: MA

Sampler(s): A. Kaczowka

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10= H_3PO_4 11= 12=

List preservative code below:

QA/QC Reporting Notes:
* additional charges may apply

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

MA DEP MCP CAM Report: Yes ☐ No☐
CT DPH RCP Report: Yes ☐ No ☐

QA/QC Reporting Level
☐ Standard ☐ No QC ☐ DQA*
☐ NY ASP A* ☐ NY ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ TIER II* ☐ TIER IV*
☐ Other

State-specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TPH 1600 PCB 8082	8260 (full w EDB) and 1,4 dioxane	8270 (full w/ total phenols)	T35, TRC	Cyanide, Chloride	total metals Sb, As, Cd, Cr III, Cr VI, Cu, Pb, Hg, Ni, Se, Zn, Fe, Ag	Dis. Pb (field filtered)	
88992-01	ECS-4	5/7/14	PM	G	GW	3	3		4	X	X	X	X	X	X	X	(*) sample -04 canceled per client rq 5/9/14
-02	ECS-5	↓	↓	↓	↓	3	3		4	X	X	X	X	X	X	X	
-03	ECS-1								1							X	
~~-04~~	~~B-304~~								~~1~~							~~X~~	

19/-1/09 IR02
MA472014→MW

Relinquished by:	Received by:	Date:	Time:	Temp°C
Aaron Kaczowka		5-7-14	1458	
	Mary Sullivan	5/7/2014	1651	0.9

☐ EDD Format
☐ E-mail to

Condition upon receipt:
☐ Ambient ☑ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Report Date:
12-May-14 11:31

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Environmental Compliance Services
997 Millbury Street, Unit G
Worcester, MA 01607
Attn: Charles Klingler

Project: City Square-Front St.-Worcester, MA
Project #: 03-218836

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB89056-01	B-304	Ground Water	08-May-14 09:40	08-May-14 15:00

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435

Authorized by:

Nicole Leja
Laboratory Director

Spectrum Analytical holds certification in the State of Massachusetts for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of Massachusetts does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.
Please note that this report contains 7 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, NJ-MA012, PA-68-04426 and FL-E87936).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

MassDEP Analytical Protocol Certification Form

Laboratory Name: Spectrum Analytical, Inc.	**Project #:** 03-218836
Project Location: City Square-Front St.-Worcester, MA	**RTN:**
This form provides certifications for the following data set:	SB89056-01
Matrices: Ground Water	
CAM Protocol	

8260 VOC CAM II A	7470/7471 Hg CAM III B	MassDEP VPH CAM IV A	8081 Pesticides CAM V B	7196 Hex Cr CAM VI B	MassDEP APH CAM IX A
8270 SVOC CAM II B	7010 Metals CAM III C	MassDEP EPH CAM IV B	8151 Herbicides CAM V C	8330 Explosives CAM VIII A	TO-15 VOC CAM IX B
✓ 6010 Metals CAM III A	6020 Metals CAM III D	8082 PCB CAM V A	9012 Total Cyanide/PAC CAM VI A	9014 Total Cyanide/PAC CAM VI A	6860 Perchlorate CAM VIII B

Affirmative responses to questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	✓ Yes No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	✓ Yes No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	✓ Yes No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	✓ Yes No
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes No Yes No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to questions A through E)?	✓ Yes No

Responses to questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	✓ Yes No

Data User Note: ***Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.***

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	✓ Yes No
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes ✓ No

All negative responses are addressed in a case narrative on the cover page of this report.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Nicole Leja

Nicole Leja
Laboratory Director
Date: 5/12/2014

CASE NARRATIVE:

Data has been reported to the RDL. This report excludes estimated concentrations detected below the RDL and above the MDL (J-Flag).

The samples were received 0.7 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

MADEP has published a list of analytical methods (CAM) which provides a series of recommended protocols for the acquisition, analysis and reporting of analytical data in support of MCP decisions. "Presumptive Certainty" can be established only for those methods published by the MADEP in the MCP CAM. The compounds and/or elements reported were specifically requested by the client on the Chain of Custody and in some cases may not include the full analyte list as defined in the method. Regulatory limits may not be achieved if specific method and/or technique was not requested on the Chain of Custody.

According to WSC-CAM 5/2009 Rev.1, Table 11 A-1, recovery for some VOC analytes have been deemed potentially difficult. Although they may still be within the recommended recovery range, a range has been set based on historical control limits.

Some target analytes which are not listed as exceptions in the Summary of CAM Reporting Limits may exceed the recommended RL based on sample initial volume or weight provided, % moisture content, or responsiveness of a particular analyte to purge and trap instrumentation.

There is no relevant protocol-specific QC and/or performance standards non-conformances to report.

Sample Acceptance Check Form

Client:	Environmental Compliance Services - Worcester, MA
Project:	City Square-Front St.-Worcester, MA / 03-218836
Work Order:	SB89056
Sample(s) received on:	5/8/2014
Received by:	Jessica Hoffman

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	Yes	No	N/A
1. Were custody seals present?	☐	☑	☐
2. Were custody seals intact?	☐	☐	☑
3. Were samples received at a temperature of ≤ 6°C?	☑	☐	☐
4. Were samples cooled on ice upon transfer to laboratory representative?	☐	☑	☐
5. Were samples refrigerated upon transfer to laboratory representative?	☑	☐	☐
6. Were sample containers received intact?	☑	☐	☐
7. Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	☑	☐	☐
8. Were samples accompanied by a Chain of Custody document?	☑	☐	☐
9. Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	☑	☐	☐
10. Did sample container labels agree with Chain of Custody document?	☑	☐	☐
11. Were samples received within method-specific holding times?	☑	☐	☐

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
B-304 SB89056-01	03-218836	Ground Water	08-May-14 09:40	08-May-14

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Soluble Metals by EPA 200/6000 Series Methods													
	Filtration	**Lab Filtered**	MF	N/A			1	EPA 200.7/3005A/6010	08-May-14 16:45	08-May-14 16:45	SMR	1410327	
Soluble Metals by EPA 6000/7000 Series Methods													
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0032	1	SW846 6010C	09-May-14	09-May-14	ARF	1410406	

Soluble Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1410406 - SW846 3005A										
Blank (1410406-BLK1)						Prepared & Analyzed: 09-May-14				
Lead	< 0.0075		mg/l	0.0075						
LCS (1410406-BS1)						Prepared & Analyzed: 09-May-14				
Lead	**1.32**		mg/l	0.0075	1.25		106	85-115		
LCS Dup (1410406-BSD1)						Prepared & Analyzed: 09-May-14				
Lead	**1.32**		mg/l	0.0075	1.25		106	85-115	0.3	20
Duplicate (1410406-DUP1)			**Source: SB89056-01**			Prepared & Analyzed: 09-May-14				
Lead	< 0.0075		mg/l	0.0075		BRL				20
Matrix Spike (1410406-MS1)			**Source: SB89056-01**			Prepared & Analyzed: 09-May-14				
Lead	**1.24**		mg/l	0.0075	1.25	BRL	99	75-125		
Matrix Spike Dup (1410406-MSD1)			**Source: SB89056-01**			Prepared & Analyzed: 09-May-14				
Lead	**1.24**		mg/l	0.0075	1.25	BRL	99	75-125	0.2	20
Post Spike (1410406-PS1)			**Source: SB89056-01**			Prepared & Analyzed: 09-May-14				
Lead	**1.25**		mg/l	0.0075	1.25	BRL	100	80-120		

Notes and Definitions

dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
MF	In accordance with 40 CFR 136.3, samples for dissolved metals analysis must be filtered within 15 minutes of collection and before adding preservatives. Samples not filtered in the field within 15 minutes of collection are not within method requirements.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by:
Nicole Leja

SB89056.JLH

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 48 hour
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: ECS Worcester

Telephone #: 774-272-2212

Project Mgr. Chuck Klingler

Invoice To: ECS Agawam

P.O. No.: _____ RQN: 7989

Project No.: 03-218836

Site Name: City Square

Location: Worcester State: MA

Sampler(s): J. Ward

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= None 12= _____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= _____ X2= _____ X3= _____

G=Grab C=Composite

List preservative code below: 11

QA/QC Reporting Notes:
* additional charges may apply

MA DEP MCP CAM Report: Yes☒ No☐
CT DPH RCP Report: Yes☒ No☐

QA/QC Reporting Level
☒ Standard ☐ No QC ☐ DQA*
☐ NY ASP A* ☐ NY ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ TIER II* ☐ TIER IV*
☐ Other _____

State-specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		Analyses: Dissolved Pb							
SB89056.01	B-304	5/8/14	9:40	G	GW		1				X							Lab Filter

Relinquished by:	Received by:	Date:	Time:	Temp°C
[signature]	[signature]	5-8-14	1030	1.7
[signature]	JLH	5/8/14	1500	-1
				0.7
				0.2

☐ EDD Format _____
☒ E-mail to CKlingler@ECSconsult.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☒ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

ATTACHMENT III

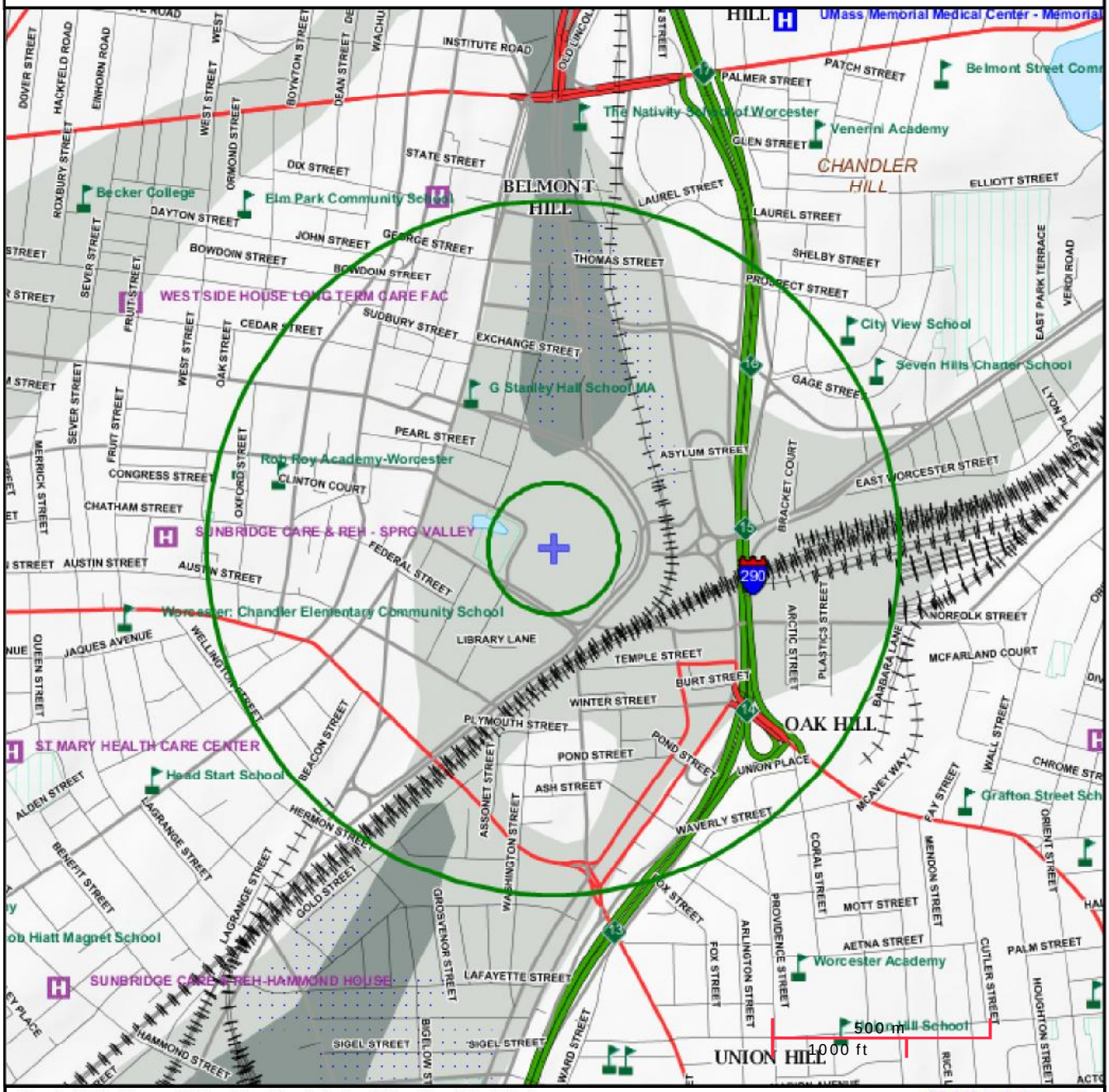
MassDEP - Bureau of Waste Site Cleanup

Site Information: MCP Numerical Ranking System Map: 500 feet & 0.5 Mile Radii

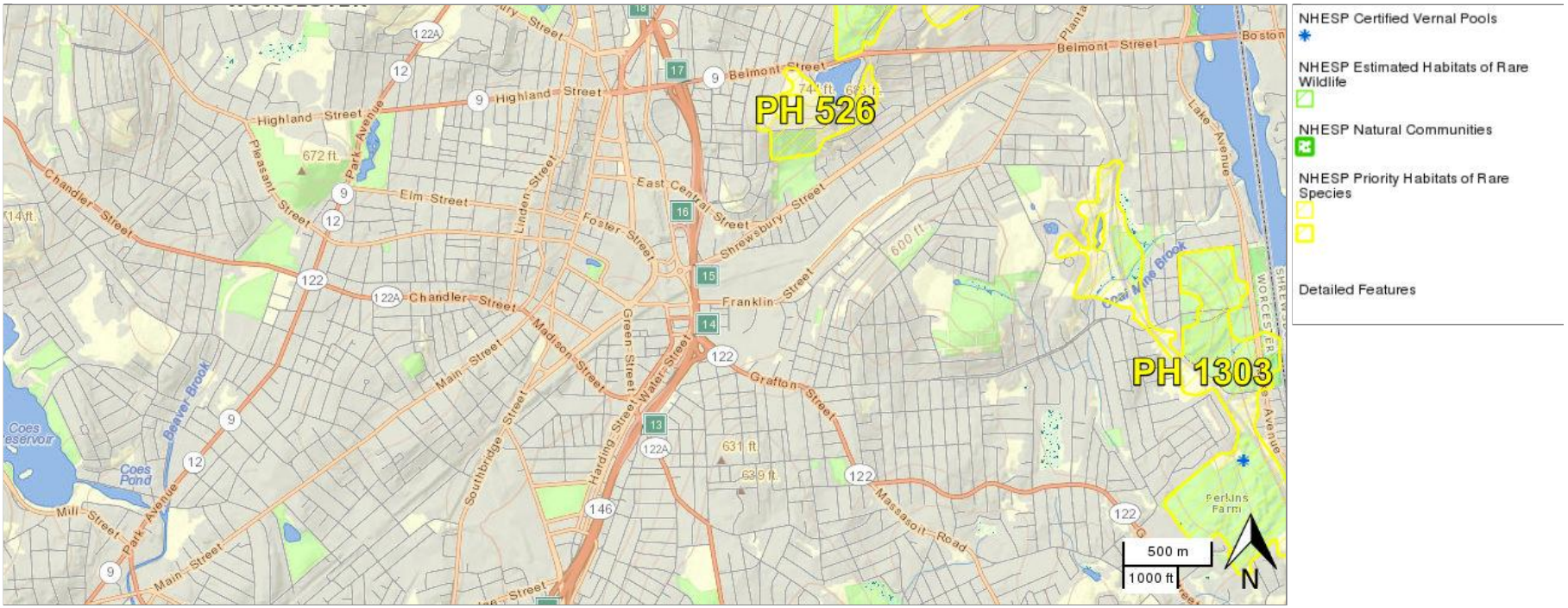
CITY SQUARE PROJECT
110 FRONT STREET WORCESTER, MA
NAD83 UTM Meters:
4682652mN , 269152mE (Zone: 19)
June 4, 2014

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately repsponsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at: http://www.mass.gov/mgis/.

MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



City Square Project, Worcester, MA



ATTACHMENT IV

Massachusetts Cultural Resource Information System
MACRIS

MHC Home | MACRIS Home

Login

Results

Get Results in Report Format
○PDF ◉Spreadsheet

Below are the results of your search, using the following search criteria:
Town(s): Worcester
Street Name: Front
Designation Type(s): Local Historic District, Local Landmark, MA Archaeo/Historic Landmark, Nat'l Historic Landmark, Nat'l Register District, Nat'l Register DOE, Nat'l Register Individual Property, Nat'l Register MPS, Nat'l Register MRA, Nat'l Register TRA, Preservation Restriction
Resource Type(s): Area

For more information about this page and how to use it, click here

No Results Found.

New Search | New Search – Same Town(s) | Previous

MHC Home | MACRIS Home

ATTACHMENT V

Enter your transmittal number → X261503
Transmittal Number

Your unique Transmittal Number can be accessed online: http://mass.gov/dep/service/online/trasmfrm.shtml

Massachusetts Department of Environmental Protection

Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: DEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. **Copy 2** must accompany your fee payment. **Copy 3** should be retained for your records

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

MassDEP
P.O. Box 4062
Boston, MA
02211

*** Note:**
For BWSC Permits, enter the LSP.

A. Permit Information

BRP WM 12
1. Permit Code: 7 or 8 character code from permit instructions

NPDES RGP
2. Name of Permit Category

Construction Dewatering
3. Type of Project or Activity

B. Applicant Information – Firm or Individual

City Square II Development Co, LLC
1. Name of Firm - Or, if party needing this approval is an individual enter name below:

Michael
2. **Last Name** of Individual

Gerhardt
3. **First Name** of Individual

4. MI

10 Post Office Square
5. Street Address

Boston
6. City/Town

MA
7. State

02109
8. Zip Code

617-422-7000
9. Telephone #

10. Ext. #

Michael Gerhardt
11. Contact Person

12. e-mail address (optional)

C. Facility, Site or Individual Requiring Approval

City Square Development
1. Name of Facility, Site Or Individual

Front Street-Parcel F
2. Street Address

Worcester
3. City/Town

MA
4. State

01608
5. Zip Code

6. Telephone #

7. Ext. #

8. DEP Facility Number (if Known)

9. Federal I.D. Number (if Known)

10. BWSC Tracking # (if Known)

D. Application Prepared by (if different from Section B)*

Environmental Compliance Services, Inc.
1. Name of Firm Or Individual

997 Millbury Street-Unit G
2. Address

Worcester
3. City/Town

MA
4. State

01607
5. Zip Code

508-756-0151
6. Telephone #

7. Ext. #

Chuck Klingler
8. Contact Person

9. LSP Number (BWSC Permits only)

E. Permit - Project Coordination

1. Is this project subject to MEPA review? ☐ yes ☒ no
   If yes, enter the project's EOEA file number - assigned when an Environmental Notification Form is submitted to the MEPA unit:

EOEA File Number

F. Amount Due

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Special Provisions:

1. ☐ **Fee** Exempt (city, town or municipal housing authority)(state agency if fee is $100 or less).
   There are no fee exemptions for BWSC permits, regardless of applicant status.
2. ☐ Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
3. ☐ Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
4. ☐ Homeowner (according to 310 CMR 4.02).

148387
Check Number

$ 950.00
Dollar Amount

6/3/2014
Date