



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1

5 Post Office Square, Suite 100

BOSTON, MA 02109-3912

CERTIFIED MAIL RETURN RECEIPT REQUESTED

FEB 19 2015

Brian E. Emery
License Site Professional
Resource Controls Associates, Inc.
474 Broadway
Pawtucket, RI 02860

Re: Authorization to discharge under the Remediation General Permit (RGP) –
MAG910000. Sinclair Manufacturing Company site located at 12 South Worcester
Street, Chartley, MA 02712, Bristol County; Authorization # MAG910659

Dear Mr. Emery:

Based on the review your Notice of Intent (NOI) submittal on behalf of Sinclair
Manufacturing Company, 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 your 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 89.9 for this site is within
a dilution range greater than fifty to one hundred (> 50-100), established in the RGP. (See
the RGP Appendix IV for Massachusetts facilities). Therefore, the limits for arsenic of

500 ug/L, trivalent chromium 1,385 ug/L, hexavalent chromium 570 ug/L, copper of 142 ug/L, selenium of 250 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 not reported a clean-up completion date for this project. Please note that if the clean-up completion exceeds the RGP termination date you may need to reapply for reissuance after the EPA RGP expires. Regardless of the termination date however, 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, Chief
Storm Water and Construction
Permits Section

Enclosure

cc: Robert Kubit, MassDEP

**2010 Remediation General Permit
Summary of Monitoring Parameters^[1]**

NPDES Authorization Number:		MAG910659
Authorization Issued:	February, 2015	
Facility/Site Name:	Sinclair Manufacturing Company	
Facility/Site Address:	12 south Worcester Street, Chartley, MA 02712, Bristol County	
	Email address of owner: dlemieux@sinclairmfg.com	
Legal Name of Operator:	Resource Controls Associates, Inc.	
Operator contact name, title, and Address:	Brian E. Emery. LSP Ph: 401-728-6860	
	Email: bemery@resourcecontrols.com	
Estimated date of The Project Completion:	Not Reported- believed unknown	
Category and Sub-Category:	Category. Subcategory Category III. Contaminated Construction Dewatering. Subcategory B. Know Contaminated Sites	
RGP Termination Date:	September 2015	
Receiving Water:	Chartley Brook- North Site	

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

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (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
	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) ⁴	100 ug/L/ Me#8260C/ ML 2ug/L

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	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
	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

	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)
	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/ML 5ug/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/ML 5ug/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}		Minimum level=ML	
		Freshwater			
	39. Antimony	5.6		ML	10
✓	40. Arsenic **	500		ML	20

	Metal parameter	Total Recoverable Metal Limit @ H¹⁰ = 50 mg/l CaCO₃ for discharges in Massachusetts (ug/l) ^{11/12}		Minimum level=ML	
		Freshwater			
	41. Cadmium **	0.2			10
✓	42. Chromium III (trivalent) **	1,385		ML	15
✓	43. Chromium VI (hexavalent) **	570		ML	10
✓	44. Copper **	142		ML	15
	45. Lead **	1.3		ML	20
	46. Mercury **	0.9		ML	0.2
	47. Nickel **	29		ML	20
✓	48. Selenium **	250		ML	20
	49. Silver	1.2		ML	10
	50. Zinc **	66.6		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 "Aroclor 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 $DF \times 1,000 \text{ ug/L}$ (the iron base limit). Therefore DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit = $1,000 \times 2 = 2,000 \text{ ug/L}$, 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

February 3, 2015

Mr. Victor Alvarez
United States Environmental Protection Agency - Region 1
5 Post Office Square, Mail Code OEP06-4
Boston, Massachusetts 02109-3912

SUBJECT: **Notice of Intent (NOI)**
 Remedial General Permit
 Sinclair Manufacturing Company
 12 South Worcester Street
 Chartley, Massachusetts
 MassDEP RTN 4-15384

Dear Mr. Alvarez:

Resource Control Associates, Inc. (Resource Controls) has prepared the attached Remediation General Permit (RGP) Notice of Intent (NOI) (Attachment A) on behalf of the Sinclair Manufacturing Company (Sinclair) for the property located at 12 South Worcester Street in Chartley, Massachusetts (the "Site"). Activities proposed for the Site include installing one six-inch recovery well and on-site treatment of contaminated groundwater generated during the implementation of an aquifer pump test. Data gathered during the execution of the pump test shall be used to design a long term permanent groundwater treatment system expected to be installed in late summer or early fall of 2015.

A Locus Map depicting the Site and relevant Site features is included in Attachment B (Figure 1). A Site Plan depicting proposed discharge locations and the Site relative to National Heritage & Endangered Species Program (NHESP) priority habitats is included in Attachment B (Figure 2). A Proposed Treatment System plan depicting the approximate location of the proposed recovery well, treatment system, and discharge point is included Attachment B (Figure 3).

BACKGROUND

The Site was purchased by Sinclair in 1947. Sinclair manufactures custom hermetic packages. The previous owners/occupants at the Site are unknown. The Site is currently in Phase II of the Massachusetts Contingency Plan (MCP) under RTN 4-15384.

The property is currently developed with three (3) structures; the manufacturing facility with additions and offices, a garage/maintenance shed and storage shed. The Site consists of four (4) parcels of land with a total land area of approximately 87,123 square feet (2 acres). The manufacturing facility is approximately 31,865 square feet in size. The original building completed construction in 1871. The maintenance shed is approximately 1,419 square feet in size and was built in 1985. Approximately ninety percent of the Site is paved with a small landscaped area along South Worcester Street and the driveway. A Site Plan is included as Figure 2.

Client Advocacy · Engineering Design · Environmental Services

On February 4, 2000 the MassDEP conducted an inspection of the Site and determined that industrial wastewater had inadvertently been discharged to the sanitary septic system. As a result, Sinclair ceased discharging the industrial waste water to the septic system and had the industrial wastewater analyzed for volatile organic compounds (VOCs) and metals. The analysis indicated the presence of trichloroethylene (TCE), chromium, lead, copper, nickel and silver above MassDEP reportable concentrations.

During subsequent site inspections, four outfall pipes were discovered to discharge to Chartley Brook; outfalls 1 and 4 discharged non-contact cooling water while outfalls 2 and 3 discharged from a floor drain and connected drain troughs inside the building. The other potential source location is the former exterior storage area where 55-gallon drums of TCE were stored. This area has since been covered by building additions. Soil samples with the highest levels of TCE were collected from the former storage area. The date of the release, to the best of Sinclair's knowledge is circa 1950's, and volume is unknown.

On April 6, 2000 the MassDEP issued a Notice of Responsibility (NOR) to Sinclair and assigned RTN 4-15384. The MassDEP responded with an IRA Conditional Approval letter dated June 13, 2000. The MassDEP requested that the IRA be designed to assess potential Conditions of Substantial Release Migration (SRM) as defined at 310 CMR 40.0006 pursuant to 310 CMR 40.0412(1) and (3), specifically for the potential release to migrate greater than 200 feet per year; potential for impact to private water supply wells; potential to impact surface water; and potential to impact indoor air at a daycare located on the adjacent property.

In May 2000, an IRA Plan was submitted to the MassDEP that outlined the response actions that would be taken to assess the release. These response actions included test pits, the advancement of soil borings, the installation of monitoring wells and collection of surface water, soil, groundwater and sediment samples. The MassDEP responded with an IRA Conditional Approval letter dated June 13, 2000. On March 28, 2001 a Phase I - Initial Site Assessment/Tier Classification Report was submitted. Multiple IRA Status reports have been submitted semi-annually as required by the MCP. In October 2008, a Tier Classification Submittal and Tier I Permit Application were submitted. A Modified IRA Plan was submitted in May 2010 that proposed a pilot test of in-situ chemical oxidation (ISCO). The Site is currently within Phase II of the Massachusetts Contingency Plan (MCP).

On October 23, 2014, Resource Controls was retained to overseeing response actions at the Site. Based on the available data, Resource Controls had determined that response actions performed under the IRA Plan had been completed and as such, submitted an IRA Completion Report to the MassDEP on January 9, 2015. Ongoing activities at the Site shall be conducted under a Release Abatement Measure (RAM) and/or as part of Comprehensive Response Actions.

REMEDIAL ACTIVITIES

The overburden and bedrock groundwater at this Site currently contains contaminants of concern (primarily VOCs) over MCP GW-2 and GW-3 standards. The objective of response activities at the Site is to reduce contaminants of concern in groundwater to below (MCP) standards. The installation of a groundwater pump and treat system is being considered to treat impacted groundwater. In order to determine the efficiency and effectiveness of the remedial option, Resource Controls has proposed performing an aquifer pump test on a six-inch recovery well that has been tentatively scheduled in the spring of 2015.

During the aquifer test, groundwater purged from the recovery well shall be pumped to a 21,000-gallon frac tank. A submersible pump shall be utilized to pump water from the frac tank through a duplex bag filter unit, two (2) 1,000-pound carbon vessels, and one (1) in-line flow meter prior to discharging at an

approximate discharge rate of 20 to 30 gallons per minute to Chartley Brook located along the northern boundary of the Site property. All treatment system units shall be accessible for maintenance, monitoring, and sampling purposes. Samples of the treatment system influent and effluent shall be collected in accordance with applicable RGP requirements. The treatment system is expected to operate continuously for three days and managed under 24 hour surveillance. A Proposed System Layout Plan depicting the configuration of the proposed treatment system is included in Attachment B (Figure 4).

Data gathered during the execution of the pump test shall be used to design a long term permanent groundwater treatment system expected to be installed in late summer or early fall of 2015. To comply with the general requirements of EPA's Massachusetts General Permit (Permit No. MAG910000) the RGP obtained for the implementation of the aquifer pump test shall be updated and modified for use with a permanent system.

NOI GROUNDWATER SAMPLING DATA

The location of the proposed bedrock pumping well is near existing bedrock monitoring well BR-1. Refer to the Site Plan included as Attachment B – Figure 2 for the approximate location of BR-1. Monitoring well BR-1 has the highest concentration of VOCs in groundwater on the Site. Refer to Table 1 included as Attachment C. Referring to Table 1, eight rounds of groundwater samples have been collected from BR-1 since July 2010. VOC groundwater data collected from BR-1 within two years of this NOI is being used to supplement the requirements of the NOI. A copy of the laboratory analytical report for samples collected from BR-1 is included in Attachment D.

On January 22, 2015, Resource Controls collected groundwater samples from monitor well BR-1 to comply with the sampling requirements of the NOI. A peristaltic pump was utilized to collect the samples following modified low-flow methodology. The samples were submitted under standard chain-of-custody protocol to Contest Analytical Laboratory, Inc. (ConTest) of East Longmeadow, Massachusetts for analysis of all compounds, except for VOCs, listed under Category II (Non Petroleum Site Remediation), sub-category B (VOC Sites with Additional Contamination) of the NPDES General Permit (No. MAGA910000). Laboratory analytical results revealed a detection of bis(2-thylhexyl)phthalate, arsenic, chromium (total), trivalent chromium, iron, chloride, residual chlorine, phenol, and total suspended solids. A copy of the laboratory analytical report is included in Attachment C. Refer to the Proposed Treatment System Plan (Attachment B – Figure 3) for a depiction of Site monitoring wells.

ADDITIONAL INFORMATION

Resource Controls is currently consulting with the United States Fish and Wildlife Service and the Massachusetts National Heritage and Endangered Species Program to ensure no threatened or endangered habitats will be affected by the discharge event.

Thank you very much for your consideration. If you have any questions, please contact the undersigned at your convenience.

Very truly yours,

RESOURCE CONTROL ASSOCIATES, INC.



Brian C. Emery, LSP
Senior Environmental Scientist

Attachments: Attachment A: Notice of Intent (NOI)
Attachment B: Locus Map
Site Plan
Proposed Treatment System Plan
Proposed System Layout Plan
Attachment C: Table 1 – Summary of Groundwater Analytical Results
Attachment D: Laboratory Analytical Report

cc: Sinclair Manufacturing Company

ATTACHMENT A

Notice of Intent (NOI)

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 : Sinclair Manufacturing Company		Facility/site mailing address:			
Location of facility/site :	Facility SIC code(s):	Street:			
longitude: 71.226888	none	PO Box 398			
latitude: 41.950111		12 South Worcester Street			
b) Name of facility/site owner :		Town: Chartley			
Email address of facility/site owner :		State:	Zip:	County:	
dlemieux@sinclairmfg.com		MA	02712	Bristol	
Telephone no. of facility/site owner : 508-222-7440		Owner is (check one): 1. Federal <input type="radio"/> 2. State/Tribal <input type="radio"/> 3. Private <input checked="" type="radio"/> 4. Other <input type="radio"/> if so, describe:			
Fax no. of facility/site owner : 508-226-0517					
Address of owner (if different from site):					
Street:					
Town:		State:	Zip:	County:	
c) Legal name of operator :		Operator telephone no: 401-728-6860			
Resource Control Associates, Inc.		Operator fax no.: 401-727-1849		Operator email: bemery@resourcecontrols.com	
Operator contact name and title:		Brian E. Emery P.G., LSP			
Address of operator (if different from owner):		Street: 474 Broadway			
Town: Pawtucket		State: RI	Zip: 02860	County: Providence	

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:

DEP, Lakeville
Bob Merphy, 508-946-2700

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.

<u>Activity Category</u>	<u>Activity Sub-Category</u>
I - Petroleum Related Site Remediation	A. Gasoline Only Sites <input type="checkbox"/> B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) <input type="checkbox"/> C. Petroleum Sites with Additional Contamination <input type="checkbox"/>
II - Non Petroleum Site Remediation	A. Volatile Organic Compound (VOC) Only Sites <input type="checkbox"/> B. VOC Sites with Additional Contamination <input type="checkbox"/> C. Primarily Heavy Metal Sites <input type="checkbox"/>
III - Contaminated Construction Dewatering	A. General Urban Fill Sites <input type="checkbox"/> B. Known Contaminated Sites <input checked="" type="checkbox"/>

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

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:	
groundwater remediation via a pump and filter system	
b) Provide the following information about each discharge:	
1) Number of discharge points: <input type="text" value="1"/>	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft ³ /s)? Max. flow <input type="text" value="0.00445"/> Is maximum flow a design value ? Y <input checked="" type="radio"/> N <input type="radio"/> Average flow (include units) <input type="text" value="0.0446"/> Is average flow a design value or estimate? <input type="text" value="estimate"/>
3) Latitude and longitude of each discharge within 100 feet:	
pt.1: lat. <input type="text" value="41.950364"/> long. <input type="text" value="71.226549"/>	pt.2: lat. <input type="text"/> long. <input type="text"/> ;
pt.3: lat. <input type="text"/> long. <input type="text"/>	pt.4: lat. <input type="text"/> long. <input type="text"/> ;
pt.5: lat. <input type="text"/> long. <input type="text"/>	pt.6: lat. <input type="text"/> long. <input type="text"/> ;
pt.7: lat. <input type="text"/> long. <input type="text"/>	pt.8: lat. <input type="text"/> long. <input type="text"/> ; etc.
4) If hydrostatic testing, total volume of the discharge (gals): <input type="text"/>	5) Is the discharge intermittent <input checked="" type="radio"/> or seasonal <input type="radio"/> ? Is discharge ongoing? Y <input checked="" type="radio"/> N <input type="radio"/>
c) Expected dates of discharge (mm/dd/yy): start <input type="text" value="Sep 21, 2015"/> end <input type="text"/>	
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). <input type="text" value="Groundwater. See attached Figure 4 for treatment diagram and discharge point. Receiving area is a brook."/>	

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)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	2540D	1,400	33,000	0	33,000	0
2. Total Residual Chlorine (TRC)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	4500	20	30	0	30	0
3. Total Petroleum Hydrocarbons (TPH)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	1664B	1,400	<1,400	0	<1,400	0
4. Cyanide (CN)	57125	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	SW-846 9014	10	<10	0	<10	0
5. Benzene (B)	71432	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8260C	1.0	<1.0	0	<1.0	0
6. Toluene (T)	108883	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8260C	1.0	<1.0	0	<1.0	0
7. Ethylbenzene (E)	100414	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8260C	1.0	<1.0	0	<1.0	0
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8260C	3.0	<3.0	0	<3.0	0
9. Total BTEX ²	n/a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8260C	6.0	<6.0	0	<6.0	0
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) ³	106934	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	504.1	0.020	<0.020	0	<0.020	0
11. Methyl-tert-Butyl Ether (MtBE)	1634044	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8260C	1.0	<1.0	0	<1.0	0
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8260C	1.0	<1.0	0	<1.0	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.

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
13. tert-Amyl Methyl Ether (TAME)	9940508	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8260C	1.0	<1.0	0	<1.0	0
14. Naphthalene	91203	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8260C	1.0	<1.0	0	<1.0	0
15. Carbon Tetrachloride	56235	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8260C	1.0	<1.0	0	<1.0	0
16. 1,2 Dichlorobenzene (o-DCB)	95501	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8260C	1.0	<1.0	0	<1.0	0
17. 1,3 Dichlorobenzene (m-DCB)	541731	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8260C	1.0	<1.0	0	<1.0	0
18. 1,4 Dichlorobenzene (p-DCB)	106467	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8260C	1.0	<1.0	0	<1.0	0
18a. Total dichlorobenzene		<input type="checkbox"/>	<input type="checkbox"/>								
19. 1,1 Dichloroethane (DCA)	75343	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8260C	1.0	<1.0	0	<1.0	0
20. 1,2 Dichloroethane (DCA)	107062	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8260C	1.0	<1.0	0	<1.0	0
21. 1,1 Dichloroethene (DCE)	75354	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	8260C	1.0	1.4	0	1.4	0
22. cis-1,2 Dichloroethene (DCE)	156592	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	8260C	1.0	68	0	68	0
23. Methylene Chloride	75092	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8260C	1.0	<1.0	0	<1.0	0
24. Tetrachloroethene (PCE)	127184	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	8260C	5.0	29	0	29	0
25. 1,1,1 Trichloro-ethane (TCA)	71556	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	8260C	1.0	6.2	0	6.2	0
26. 1,1,2 Trichloro-ethane (TCA)	79005	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8260C	1.0	<1.0	0	<1.0	0
27. Trichloroethene (TCE)	79016	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	8260C	5.0	4,500	0	4,500	0

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
28. Vinyl Chloride (Chloroethene)	75014	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8260C	1.0	<1.0	0	<1.0	0
29. Acetone	67641	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8260C	5.0	<5.0	0	<5.0	0
30. 1,4 Dioxane	123911	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8260C	250	<250	0	<250	0
31. Total Phenols	108952	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	420.1	50	52	0	50	0
32. Pentachlorophenol (PCP)	87865	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	10	<10	0	<10	0
33. Total Phthalates (Phthalate esters) ⁴		<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	8270D	2.0	6.8	0	6.8	0
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	8270D	2.0	6.8	0	6.8	0
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270	0.20	<0.20	0	<0.20	0
a. Benzo(a) Anthracene	56553	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.050	<0.050	0	<0.050	0
b. Benzo(a) Pyrene	50328	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.10	<0.10	0	<0.10	0
c. Benzo(b)Fluoranthene	205992	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.050	<0.050	0	<0.050	0
d. Benzo(k)Fluoranthene	207089	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.20	<0.20	0	<0.20	0
e. Chrysene	21801	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.20	<0.20	0	<0.20	0
f. Dibenzo(a,h)anthracene	53703	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.20	<0.20	0	<0.20	0
g. Indeno(1,2,3-cd) Pyrene	193395	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.20	<0.20	0	<0.20	0
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	1.0	<1.0	0	<1.0	0

⁴The 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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.30	<0.30	0	<0.30	0
i. Acenaphthylene	208968	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.30	<0.30	0	<0.30	0
j. Anthracene	120127	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.20	<0.20	0	<0.20	0
k. Benzo(ghi) Perylene	191242	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.50	<0.50	0	<0.50	0
l. Fluoranthene	206440	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.50	<0.50	0	<0.50	0
m. Fluorene	86737	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	1.0	<1.0	0	<1.0	0
n. Naphthalene	91203	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	1.0	<1.0	0	<1.0	0
o. Phenanthrene	85018	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.050	<0.050	0	<0.050	0
p. Pyrene	129000	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	1.0	<1.0	0	<1.0	0
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8082A	0.20	<.20	0	<0.20	0
38. Chloride	16887006	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	4500	1,000	60,000	0	60,000	0
39. Antimony	7440360	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	6010C	5.0	<5.0	0	<5.0	0
40. Arsenic	7440382	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	6010C	2.0	6.5	0	6.5	0
41. Cadmium	7440439	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	6020A	2.5	<2.5	0	<2.5	0
42. Chromium III (trivalent)	16065831	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	calculation	NA	8.1	0	8.1	0
43. Chromium VI (hexavalent)	18540299	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	6020A	5.0	8.1	0	8.1	0
44. Copper	7440508	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	6020A	25	<25	0	<25	0
45. Lead	7439921	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	6020A	5.0	<5.0	0	<5.0	0
46. Mercury	7439976	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	7470B	0.10	<0.10	0	<0.10	0
47. Nickel	7440020	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	6020A	25	<25	0	<25	0
48. Selenium	7782492	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	6020A	25	<25	0	<25	0
49. Silver	7440224	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	6020A	2.5	<2.5	0	<2.5	0
50. Zinc	7440666	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	6020A	50	<50	0	<50	0
51. Iron	7439896	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	6010C	50	10,000	0	10,000	0
Other (describe):		<input type="checkbox"/>	<input type="checkbox"/>								

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)
		<input type="checkbox"/>	<input type="checkbox"/>								
		<input type="checkbox"/>	<input type="checkbox"/>								

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

<p><i>Step 1:</i> Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y <input checked="" type="radio"/> N <input type="radio"/></p>	<p>If yes, which metals? Cadmium, copper, lead, selenium, silver, iron</p>												
<p><i>Step 2:</i> 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?</p> <table border="1"> <tr> <td>Metal: Cadmium</td> <td>DF: 9.96</td> </tr> <tr> <td>Metal: Copper</td> <td>DF: 9.96</td> </tr> <tr> <td>Metal: Lead</td> <td>DF: 9.96</td> </tr> <tr> <td>Metal: Selenium</td> <td>DF: 9.96</td> </tr> <tr> <td>Etc. Silver</td> <td>9.96</td> </tr> <tr> <td>Iron</td> <td>9.96</td> </tr> </table>	Metal: Cadmium	DF: 9.96	Metal: Copper	DF: 9.96	Metal: Lead	DF: 9.96	Metal: Selenium	DF: 9.96	Etc. Silver	9.96	Iron	9.96	<p>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 <input checked="" type="radio"/> N <input type="radio"/> If Y, list which metals: Cadmium & Iron</p>
Metal: Cadmium	DF: 9.96												
Metal: Copper	DF: 9.96												
Metal: Lead	DF: 9.96												
Metal: Selenium	DF: 9.96												
Etc. Silver	9.96												
Iron	9.96												

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

<p>a) A description of the treatment system, including a schematic of the proposed or existing treatment system:</p> <p>See attached Figure 4. Depending on the production rate of the recovery well groundwater may be pumped to a frac tank. The water will then be pumped from the tank(if used), passed through two (2) filter bag units, two (2) 2,000 pound granular activated carbon vessels, and a flow meter prior to discharging to a brook. Sample ports will be provided at each system component for monitoring and sampling.</p>						
<p>b) Identify each applicable treatment unit (check all that apply):</p>	Frac. tank <input checked="" type="checkbox"/>	Air stripper <input type="checkbox"/>	Oil/water separator <input type="checkbox"/>	Equalization tanks <input type="checkbox"/>	Bag filter <input checked="" type="checkbox"/>	GAC filter <input checked="" type="checkbox"/>
	Chlorination <input type="checkbox"/>	De-chlorination <input type="checkbox"/>	Other (please describe):			

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 gpm Maximum flow rate of treatment system gpm
 Design flow rate of treatment system 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 <input checked="" type="checkbox"/>	Within facility (sewer) <input type="checkbox"/>	Storm drain <input type="checkbox"/>	Wetlands <input type="checkbox"/>	Other (describe): <input type="text"/>
------------------------------------	---	--	--------------------------------------	-----------------------------------	---

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:

Water will be discharged to the Charley Brook (north of site)

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

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 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)?

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:	Sinclair Manufacturing Company
Operator signature:	
Printed Name & Title:	Brian Emery P.G., LSP
Date:	2/3/2015

ATTACHMENT B

Figures



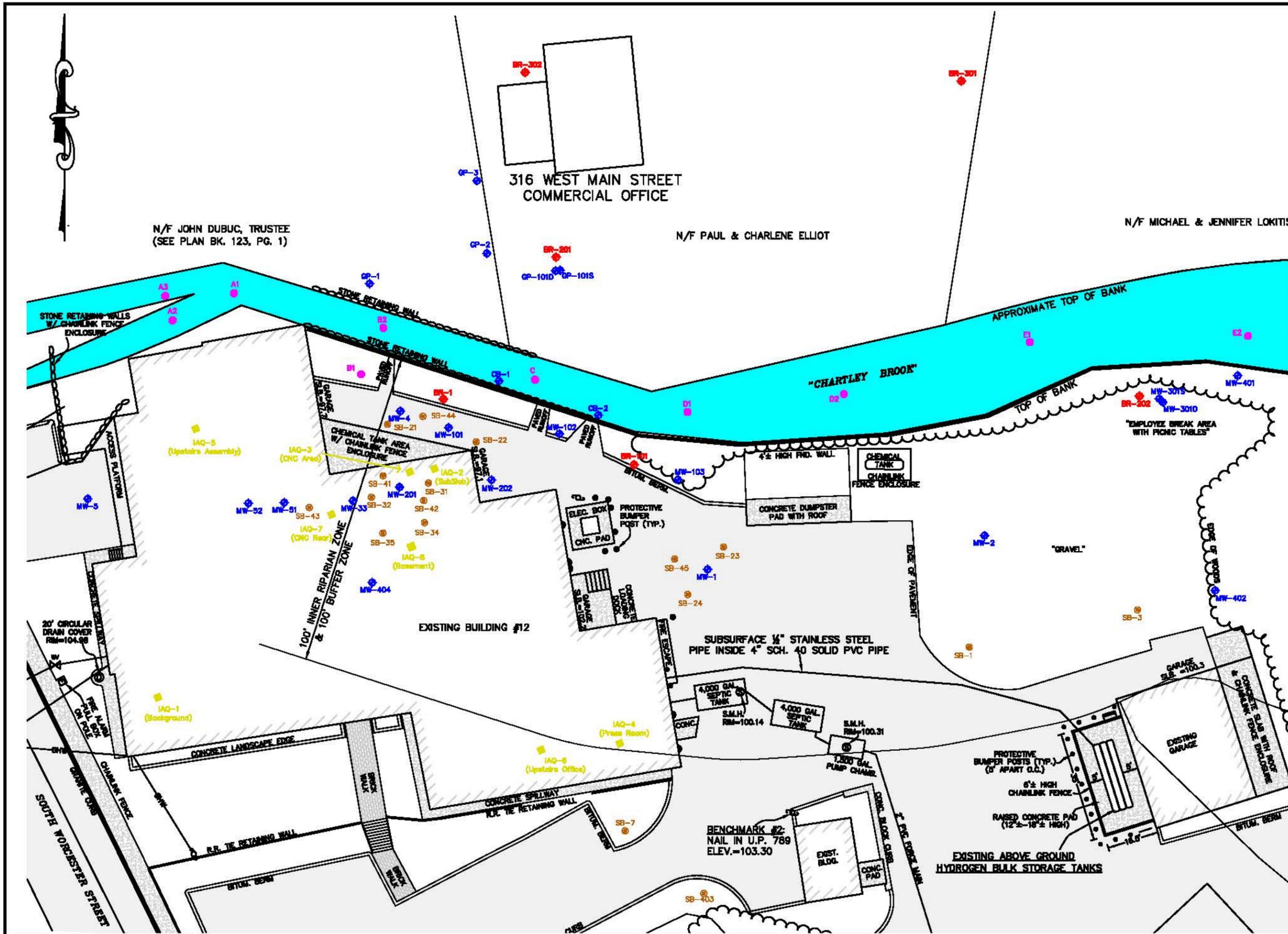
Source: Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs
 1987 USGS Topographic Map - NORTON, Massachusetts Quadrangle

LOCUS MAP

**12 WORCESTER STREET
 NORTON, MASSACHUSETTS**



DRAWN BY	PROJECT	PRINT DATE	FIGURE
BPC	7288	11/21/2014	1



LEGEND

- EDGE 100' BUFFER ZONE
- CHAINLINK FENCE
- DRAIN LINE
- WATER LINE
- GAS LINE
- SEWER LINE
- OVERHEAD WIRES
- EDGE OF WOODS
- GRANITE CURBING
- CONCRETE CURBING
- BITUMINOUS CURBING
- UNDERGROUND UTILITIES
- UTILITY POLE
- SEWER MANHOLE
- DRAIN MANHOLE
- CATCH BASIN
- OVERBURDEN MONITORING WELL
- BEDROCK MONITORING WELL
- INDOOR AIR SAMPLE LOCATION
- BROOK SEDIMENT AND SURFACE WATER SAMPLE
- SOIL BORING
- CONCRETE SURFACE
- PAVED SURFACE

Approx. Scale 1 inch = 30 feet

PREPARED BY:

 Resource Controls
 Engineering & Environmental Solutions

DRAWING DESCRIPTION:
SITE PLAN

PROJECT DESCRIPTION:
**SINCLAIR MANUFACTURING
 12 S. WORCESTER STREET
 CHARTLEY, MA**

CLIENT:
SINCLAIR MANUFACTURING COMPANY

LOCATION:
12 S. WORCESTER STREET

DRAWN BY: BPC	CHECKED BY: BAE	APPROVED BY: RCA
DRAWING DATE: 01/07/15	SHEET NUMBER: SHEET 1 OF 1	
PROJECT NUMBER: 7288	DRAWING NAME: SITE PLAN	

FIGURE # 2



PROPOSED TREATMENT SYSTEM

12 SOUTH WORCESTER STREET
NORTON, MASSACHUSETTS



DRAWN BY

PROJECT

PRINT DATE

FIGURE

BPC

7288

01/14/2015

3

Notes:

- 1.) Figure is not to scale.
- 2.) The water treatment system is rated for 20-30 gallons per minute.
- 3.) All discharge water shall be routed to the treatment system.

Influent from
Recovery Well

2,000 lb
Carbon Treatment Vessels

Bag Filters

Submersible Pump

Frac Tank (if needed)

Effluent/Discharge

Flow Meter/Totalizer

NOT TO SCALE

PREPARED BY:



DRAWING DESCRIPTION:

**PROPOSED
SYSTEM LAYOUT**

CLIENT:

SINCLAIR MANUFACTURING

LOCATION:

**12 SOUTH WORCESTER STREET
CHARTLEY, MASSACHUSETTS**

DESIGNED BY: BPC	CHECKED BY: CCP	APPROVED BY: RCA
DRAWING DATE: 01/14/2015	SHEET NUMBER: 1 of 1	
PROJECT NUMBER: 7288	DRAWING NAME: SYSTEM LAYOUT	

FIGURE 4

ATTACHMENT C

Table 1 – Summary of Groundwater Analytical Results

TABLE 1 (cont.)
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

SINCLAIR MANUFACTURING COMPANY
12 SOUTH WORCESTER STREET
CHARTLEY, MASSACHUSETTS

Sample Identification Date Sampled	MW-301D				MW-401		MW-402	MW-404		BR-1										BR-101				BR-102	BR-201		BR-202	BR-301		BR-302	MCP Method 1		MCP Upper Concentration Limits					
	8/4/2011	Jul-12	Aug-13	9/29/2014	Aug-13	9/29/2014	Aug-13	Aug-13	Jul-06	Sep-06	Jul-10	Sep-10	8/4/2011	8/31/2011	Nov-11	Jul-12	Aug-13	9/29/2014	Jul-10	Sep-10	8/4/2011	8/31/2011	Nov-11	Jul-12	Aug-13	9/29/2014	Aug-13	Aug-13	9/29/2014	9/29/2014	Aug-13	9/29/2014	Aug-13	9/29/2014	GW-2	GW-3	UCLs in Groundwater	
VOLATILE ORGANIC COMPOUNDS (µg/L)																																						
Acetone				<5		<5																																
Benzene				<1		<1																																
Bromodichloromethane				<1		<1																																
Carbon tetrachloride				<1		<1																																
Chloroethane				<1		<1																																
Chloroform				<1		<1		<1																														
1,1-Dichloroethane				<1		<1		<1																														
1,1-Dichloroethylene				<1		<1		<1																														
cis-1,2-Dichloroethylene	51	26	37	40	20	7.3	<1	<1																														
trans-1,2-Dichloroethylene				<1		<1		<1																														
Methyl tert-butyl ether (MTBE)								<1																														
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1																														
1,1,1-Trichloroethane				<1		<1	<1	<1																														
1,1,2-Trichloroethane				<1		<1	<1	<1																														
Trichloroethylene	200	100	160	140	82	26	<1	<1																														
Vinyl chloride	1.4	1.2	<1	<1	<1	<1	<1	<1																														
All Other VOCs	ND	ND	ND	ND	ND	ND	ND	ND																														
PRIMARY POLLUTANT METALS (µg/L)																																						
Antimony			3.0		4.0		--	--																														
Arsenic			3.0		<3.0		--	--																														
Barium			95		115		--	--																														
Copper			2.7		4.2		--	--																														
Lead			0.5		1.4		--	--																														
Nickel			2		16		--	--																														
Selenium			<3.0		<3.0		--	--																														
Zinc			77		298		--	--																														
SEMI-VOLATILE ORGANIC COMPOUNDS (µg/L)																																						
Anthracene			< 0.035		< 0.035		--	--																														
Benzo(a)anthracene			< 0.025		< 0.025		--	--																														
Benzo(a)pyrene			< 0.014		< 0.014		--	--																														
Pyrene			< 0.3		< 0.3		--	--																														
All Other SVOCs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

NOTES:
 Month-Year = Data collected in Month of Year, no day provided
 Aug-13 and prior, Data Collected By Anklewitz Environmental Services
 mg/kg = milligrams per kilogram.
 -- = Not analyzed.
 < & bdl = Not detected above laboratory reporting limit.
 NS = No standard promulgated.
 * Xylene standards are for total xylenes.
Black concentrations exceed laboratory reporting limit.
Red concentrations exceed X, Y, or Z regulatory standard.
 Empty Cells = Below Laboratory Detection Limit

ATTACHMENT D

Laboratory Analytical Reports

January 30, 2015

Brian Emery
Resource Control Associates - RI
474 Broadway
Pawtucket, RI 02860

Project Location: RGP Effluent
Client Job Number:
Project Number: 7288
Laboratory Work Order Number: 15A0697

Enclosed are results of analyses for samples received by the laboratory on January 22, 2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Lisa A. Worthington
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Resource Control Associates - RI
 474 Broadway
 Pawtucket, RI 02860
 ATTN: Brian Emery

REPORT DATE: 1/30/2015

PURCHASE ORDER NUMBER: 7288-008

PROJECT NUMBER: 7288

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 15A0697

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: RGP Effluent

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
BR-1	15A0697-01	Ground Water		EPA 1664B EPA 420.1 EPA 504.1 SM21-22 2540D SM21-22 4500 CL B SM21-22 4500 CL G SW-846 6010C SW-846 6020A SW-846 7196A SW-846 7470A SW-846 8082A SW-846 8270D SW-846 9014 Tri Chrome Calc.	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
SM21-22 4500 CL G

Qualifications:**R-04**

Duplicate relative percent difference (RPD) is a less useful indicator of sample precision for sample results that are <5 times the reporting limit (RL).

Analyte & Samples(s) Qualified:**Chlorine, Residual**

15A0697-01[BR-1], B114040-DUP1

SW-846 8082A

Qualifications:**L-02**

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

Analyte & Samples(s) Qualified:**Aroclor-1260**

B114348-BS1, B114348-BSD1

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:**Aroclor-1016**

B114348-BSD1

V-06

Continuing calibration did not meet method specifications and was biased on the high side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the high side.

Analyte & Samples(s) Qualified:**Aroclor-1016**

B114348-BS1, B114348-BSD1

Aroclor-1260

B114348-BS1, B114348-BSD1

V-20

Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:**Aroclor-1016**

B114348-BLK1

Aroclor-1260

B114348-BLK1

SW-846 8270D

Qualifications:**RL-07**

Elevated reporting limit based on lowest point in calibration.
MA CAM reporting limit not met.

Analyte & Samples(s) Qualified:**Hexachlorobenzene**

15A0697-01[BR-1]

Hexachlorobutadiene

15A0697-01[BR-1]

Pentachlorophenol

15A0697-01[BR-1]

S-07

One associated surrogate standard recovery is outside of control limits but the other(s) is/are within limits. All recoveries are > 10%.

Analyte & Samples(s) Qualified:**p-Terphenyl-d14 (low)**

15A0697-01[BR-1]

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

SW-846 8270D

Laboratory control sample recoveries for required MCP Data Enhancement 8270 compounds were all within control limits specified by the method, 40-140% for base/neutrals and 30-130% for acids except for "difficult analytes" listed below and/or otherwise listed in this narrative. Difficult analytes limits are 15 and 140%: 2,4-dinitrophenol, 4-chloroaniline, 4-nitrophenol, and phenol.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

A handwritten signature in black ink, appearing to read "Daren J. Damboragian", is written over a light gray rectangular background.

Daren J. Damboragian
Laboratory Manager

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: RGP Effluent

Sample Description:

Work Order: 15A0697

Date Received: 1/22/2015

Field Sample #: BR-1

Sampled: 1/22/2015 09:15

Sample ID: 15A0697-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene (low)	ND	0.30	µg/L	1		SW-846 8270D	1/23/15	1/28/15 11:05	CJM
Acenaphthylene (low)	ND	0.30	µg/L	1		SW-846 8270D	1/23/15	1/28/15 11:05	CJM
Acetophenone	ND	10	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
Aniline	ND	5.0	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
Anthracene (low)	ND	0.20	µg/L	1		SW-846 8270D	1/23/15	1/28/15 11:05	CJM
Benzo(a)anthracene (low)	ND	0.050	µg/L	1		SW-846 8270D	1/23/15	1/28/15 11:05	CJM
Benzo(a)pyrene (low)	ND	0.10	µg/L	1		SW-846 8270D	1/23/15	1/28/15 11:05	CJM
Benzo(b)fluoranthene (low)	ND	0.050	µg/L	1		SW-846 8270D	1/23/15	1/28/15 11:05	CJM
Benzo(g,h,i)perylene (low)	ND	0.50	µg/L	1		SW-846 8270D	1/23/15	1/28/15 11:05	CJM
Benzo(k)fluoranthene (low)	ND	0.20	µg/L	1		SW-846 8270D	1/23/15	1/28/15 11:05	CJM
Bis(2-chloroethoxy)methane	ND	10	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
Bis(2-chloroethyl)ether	ND	10	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
Bis(2-chloroisopropyl)ether	ND	10	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
Bis(2-Ethylhexyl)phthalate	6.8	2.0	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
4-Bromophenylphenylether	ND	10	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
Butylbenzylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
4-Chloroaniline	ND	10	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
2-Chloronaphthalene	ND	10	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
2-Chlorophenol	ND	10	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
Chrysene (low)	ND	0.20	µg/L	1		SW-846 8270D	1/23/15	1/28/15 11:05	CJM
Dibenz(a,h)anthracene (low)	ND	0.20	µg/L	1		SW-846 8270D	1/23/15	1/28/15 11:05	CJM
Dibenzofuran	ND	5.0	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
Di-n-butylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
1,2-Dichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
1,3-Dichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
1,4-Dichlorobenzene	ND	5.0	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
3,3-Dichlorobenzidine	ND	10	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
2,4-Dichlorophenol	ND	10	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
Diethylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
2,4-Dimethylphenol	ND	10	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
Dimethylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
2,4-Dinitrophenol	ND	10	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
2,4-Dinitrotoluene	ND	10	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
2,6-Dinitrotoluene	ND	10	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
Di-n-octylphthalate	ND	10	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
1,2-Diphenylhydrazine (as Azobenzene)	ND	10	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
Fluoranthene (low)	ND	0.50	µg/L	1		SW-846 8270D	1/23/15	1/28/15 11:05	CJM
Fluorene (low)	ND	1.0	µg/L	1		SW-846 8270D	1/23/15	1/28/15 11:05	CJM
Hexachlorobenzene	ND	2.0	µg/L	1	RL-07	SW-846 8270D	1/23/15	1/26/15 13:31	CMR
Hexachlorobutadiene	ND	2.0	µg/L	1	RL-07	SW-846 8270D	1/23/15	1/26/15 13:31	CMR
Hexachloroethane	ND	2.0	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
Indeno(1,2,3-cd)pyrene (low)	ND	0.20	µg/L	1		SW-846 8270D	1/23/15	1/28/15 11:05	CJM
Isophorone	ND	10	µg/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
2-Methylnaphthalene (low)	ND	1.0	µg/L	1		SW-846 8270D	1/23/15	1/28/15 11:05	CJM

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: RGP Effluent

Sample Description:

Work Order: 15A0697

Date Received: 1/22/2015

Field Sample #: BR-1

Sampled: 1/22/2015 09:15

Sample ID: 15A0697-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	10	g/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
3/4-Methylphenol	ND	10	g/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
Naphthalene (low)	ND	1.0	g/L	1		SW-846 8270D	1/23/15	1/28/15 11:05	CJM
Nitrobenzene	ND	10	g/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
2-Nitrophenol	ND	10	g/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
4-Nitrophenol	ND	10	g/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
Pentachlorophenol	ND	10	g/L	1	RL-07	SW-846 8270D	1/23/15	1/26/15 13:31	CMR
Phenanthrene (low)	ND	0.050	g/L	1		SW-846 8270D	1/23/15	1/28/15 11:05	CJM
Phenol	ND	10	g/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
Pyrene (low)	ND	1.0	g/L	1		SW-846 8270D	1/23/15	1/28/15 11:05	CJM
1,2,4-Trichlorobenzene	ND	5.0	g/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
2,4,5-Trichlorophenol	ND	10	g/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR
2,4,6-Trichlorophenol	ND	10	g/L	1		SW-846 8270D	1/23/15	1/26/15 13:31	CMR

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	35.3	15-110	
Phenol-d6	22.4	15-110	
Nitrobenzene-d5	77.2	30-130	
Nitrobenzene-d5 (low)	122	30-130	
2-Fluorobiphenyl	84.3	30-130	
2-Fluorobiphenyl (low)	116	30-130	
2,4,6-Tribromophenol	86.3	15-110	
p-Terphenyl-d14	96.2	30-130	
p-Terphenyl-d14 (low)	164	30-130	S-07

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: RGP Effluent

Sample Description:

Work Order: 15A0697

Date Received: 1/22/2015

Field Sample #: BR-1

Sampled: 1/22/2015 09:15

Sample ID: 15A0697-01

Sample Matrix: Ground Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 2]	ND	0.20	g/L	1		SW-846 8082A	1/29/15	1/30/15 10:39	MJC
Aroclor-1221 2]	ND	0.20	g/L	1		SW-846 8082A	1/29/15	1/30/15 10:39	MJC
Aroclor-1232 2]	ND	0.20	g/L	1		SW-846 8082A	1/29/15	1/30/15 10:39	MJC
Aroclor-1242 2]	ND	0.20	g/L	1		SW-846 8082A	1/29/15	1/30/15 10:39	MJC
Aroclor-1248 2]	ND	0.20	g/L	1		SW-846 8082A	1/29/15	1/30/15 10:39	MJC
Aroclor-1254 2]	ND	0.20	g/L	1		SW-846 8082A	1/29/15	1/30/15 10:39	MJC
Aroclor-1260 2]	ND	0.20	g/L	1		SW-846 8082A	1/29/15	1/30/15 10:39	MJC
Aroclor-1262 2]	ND	0.20	g/L	1		SW-846 8082A	1/29/15	1/30/15 10:39	MJC
Aroclor-1268 2]	ND	0.20	g/L	1		SW-846 8082A	1/29/15	1/30/15 10:39	MJC
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl 1]		81.6	30-150					1/30/15 10:39	
Decachlorobiphenyl 2]		73.2	30-150					1/30/15 10:39	
Tetrachloro-m-xylene 1]		86.7	30-150					1/30/15 10:39	
Tetrachloro-m-xylene 2]		73.4	30-150					1/30/15 10:39	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: RGP Effluent

Sample Description:

Work Order: 15A0697

Date Received: 1/22/2015

Field Sample #: BR-1

Sampled: 1/22/2015 09:15

Sample ID: 15A0697-01

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	5.0	g/L	5		SW-846 6020A	1/22/15	1/23/15 17:39	KSH
Arsenic	6.5	2.0	g/L	5		SW-846 6020A	1/22/15	1/23/15 17:39	KSH
Cadmium	ND	2.5	g/L	5		SW-846 6020A	1/22/15	1/23/15 17:39	KSH
Chromium	8.1	5.0	g/L	5		SW-846 6020A	1/22/15	1/23/15 17:39	KSH
Chromium, Trivalent	0.0081		mg/L	1		Tri Chrome Calc.	1/24/15	1/29/15 14:02	AMP
Copper	ND	25	g/L	5		SW-846 6020A	1/22/15	1/23/15 17:39	KSH
Iron	10	0.050	mg/L	1		SW-846 6010C	1/24/15	1/26/15 17:31	OP
Lead	ND	5.0	g/L	5		SW-846 6020A	1/22/15	1/23/15 17:39	KSH
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	1/23/15	1/26/15 10:34	SCB
Nickel	ND	25	g/L	5		SW-846 6020A	1/22/15	1/23/15 17:39	KSH
Selenium	ND	25	g/L	5		SW-846 6020A	1/22/15	1/23/15 17:39	KSH
Silver	ND	2.5	g/L	5		SW-846 6020A	1/22/15	1/23/15 17:39	KSH
Zinc	ND	50	g/L	5		SW-846 6020A	1/22/15	1/23/15 17:39	KSH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: RGP Effluent

Sample Description:

Work Order: 15A0697

Date Received: 1/22/2015

Field Sample #: BR-1

Sampled: 1/22/2015 09:15

Sample ID: 15A0697-01

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/PHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Chloride	60	1.0	mg/L	1		SM21-22 4500 CL B	1/28/15	1/28/15 11:40	ABH
Chlorine, Residual	0.036	0.020	mg/L	1	R-04	SM21-22 4500 CL G	1/22/15	1/22/15 22:43	DJM
Cyanide	ND	0.010	mg/L	1		SW-846 9014	1/28/15	1/29/15 9:50	VAK
Hexavalent Chromium	ND	0.0040	mg/L	1		SW-846 7196A	1/22/15	1/22/15 23:50	DJM
Phenol	0.052	0.050	mg/L	1		EPA 420.1	1/28/15	1/29/15 13:00	LL
Total Suspended Solids	33	5.0	mg/L	1		SM21-22 2540D	1/23/15	1/23/15 14:55	LL
Silica Gel Treated HEM (SGT-HEM)	ND	1.4	mg/L	1		EPA 1664B	1/29/15	1/29/15 11:00	LL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: RGP Effluent

Sample Description:

Work Order: 15A0697

Date Received: 1/22/2015

Sampled: 1/22/2015 09:15

Field Sample #: BR-1

Sample ID: 15A0697-01

Sample Matrix: Ground Water

Drinking Water Organics EPA 504.1

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,2-Dibromoethane (EDB) (1)	ND	0.020	g/L	1		EPA 504.1	1/23/15	1/23/15 19:18	JMB
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
1,3-Dibromopropane (1)	112		70-130					1/23/15 19:18	
1,3-Dibromopropane (2)	118		70-130					1/23/15 19:18	

Sample Extraction Data

EPA 1664B

Lab Number [Field ID]	Batch	Initial [mL]	Date	
15A0697-01 BR-1]	B114361	1000	01/29/15	

EPA 420.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15A0697-01 BR-1]	B114247	50.0	50.0	01/28/15

Prep Method: EPA 504 water-EPA 504.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15A0697-01 BR-1]	B114084	35.0	35.0	01/23/15

SM21-22 2540D

Lab Number [Field ID]	Batch	Initial [mL]	Date	
15A0697-01 BR-1]	B114105	100	01/23/15	

SM21-22 4500 CL B

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15A0697-01 BR-1]	B114287	100	100	01/28/15

SM21-22 4500 CL G

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15A0697-01 BR-1]	B114040	100	100	01/22/15

Prep Method: SW-846 3005A-SW-846 6010C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15A0697-01 BR-1]	B114154	50.0	50.0	01/24/15

Prep Method: SW-846 3005A-SW-846 6020A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15A0697-01 BR-1]	B114041	50.0	50.0	01/22/15

SW-846 7196A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15A0697-01 BR-1]	B114042	50.0	50.0	01/22/15

Sample Extraction Data

Prep Method: SW-846 7470A Prep-SW-846 7470A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15A0697-01 BR-1]	B114094	6.00	6.00	01/23/15

Prep Method: SW-846 3510C-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15A0697-01 BR-1]	B114348	1000	10.0	01/29/15

Prep Method: SW-846 3510C-SW-846 8270D

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15A0697-01 BR-1]	B114108	1000	1.00	01/23/15

SW-846 9014

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15A0697-01 BR-1]	B114420	50.0	50.0	01/28/15

Prep Method: SW-846 3005A-Tri Chrome Calc.

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15A0697-01 BR-1]	B114155	1.00	1.00	01/24/15

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B114108 - SW-846 3510C

Blank (B114108-BLK1)

Prepared: 01/23/15 Analyzed: 01/26/15

Acenaphthene	ND	5.0	g/L							
Acenaphthene (low)	ND	0.30	g/L							
Acenaphthylene	ND	5.0	g/L							
Acenaphthylene (low)	ND	0.30	g/L							
Acetophenone	ND	10	g/L							
Aniline	ND	5.0	g/L							
Anthracene	ND	5.0	g/L							
Anthracene (low)	ND	0.20	g/L							
Benzo(a)anthracene	ND	5.0	g/L							
Benzo(a)anthracene (low)	ND	0.050	g/L							
Benzo(a)pyrene	ND	5.0	g/L							
Benzo(a)pyrene (low)	ND	0.10	g/L							
Benzo(b)fluoranthene	ND	5.0	g/L							
Benzo(b)fluoranthene (low)	ND	0.050	g/L							
Benzo(g,h,i)perylene	ND	5.0	g/L							
Benzo(g,h,i)perylene (low)	ND	0.50	g/L							
Benzo(k)fluoranthene	ND	5.0	g/L							
Benzo(k)fluoranthene (low)	ND	0.20	g/L							
Bis(2-chloroethoxy)methane	ND	10	g/L							
Bis(2-chloroethyl)ether	ND	10	g/L							
Bis(2-chloroisopropyl)ether	ND	10	g/L							
Bis(2-Ethylhexyl)phthalate	ND	10	g/L							
4-Bromophenylphenylether	ND	10	g/L							
Butylbenzylphthalate	ND	10	g/L							
4-Chloroaniline	ND	10	g/L							
2-Chloronaphthalene	ND	10	g/L							
2-Chlorophenol	ND	10	g/L							
Chrysene	ND	5.0	g/L							
Chrysene (low)	ND	0.20	g/L							
Dibenz(a,h)anthracene	ND	5.0	g/L							
Dibenz(a,h)anthracene (low)	ND	0.20	g/L							
Dibenzofuran	ND	5.0	g/L							
Di-n-butylphthalate	ND	10	g/L							
1,2-Dichlorobenzene	ND	5.0	g/L							
1,3-Dichlorobenzene	ND	5.0	g/L							
1,4-Dichlorobenzene	ND	5.0	g/L							
3,3-Dichlorobenzidine	ND	10	g/L							
2,4-Dichlorophenol	ND	10	g/L							
Diethylphthalate	ND	10	g/L							
2,4-Dimethylphenol	ND	10	g/L							
Dimethylphthalate	ND	10	g/L							
2,4-Dinitrophenol	ND	10	g/L							
2,4-Dinitrotoluene	ND	10	g/L							
2,6-Dinitrotoluene	ND	10	g/L							
Di-n-octylphthalate	ND	10	g/L							
1,2-Diphenylhydrazine (as Azobenzene)	ND	10	g/L							
Fluoranthene	ND	5.0	g/L							
Fluoranthene (low)	ND	0.50	g/L							
Fluorene	ND	5.0	g/L							
Fluorene (low)	ND	1.0	g/L							
Hexachlorobenzene	ND	10	g/L							
Hexachlorobutadiene	ND	10	g/L							

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B114108 - SW-846 3510C

Blank (B114108-BLK1)

Prepared: 01/23/15 Analyzed: 01/26/15

Hexachloroethane	ND	10	g/L							
Indeno(1,2,3-cd)pyrene	ND	5.0	g/L							
Indeno(1,2,3-cd)pyrene (low)	ND	0.20	g/L							
Isophorone	ND	10	g/L							
2-Methylnaphthalene	ND	5.0	g/L							
2-Methylnaphthalene (low)	ND	1.0	g/L							
2-Methylphenol	ND	10	g/L							
3/4-Methylphenol	ND	10	g/L							
Naphthalene	ND	5.0	g/L							
Naphthalene (low)	ND	1.0	g/L							
Nitrobenzene	ND	10	g/L							
2-Nitrophenol	ND	10	g/L							
4-Nitrophenol	ND	10	g/L							
Pentachlorophenol	ND	10	g/L							
Phenanthrene	ND	5.0	g/L							
Phenanthrene (low)	ND	0.050	g/L							
Phenol	ND	10	g/L							
Pyrene	ND	5.0	g/L							
Pyrene (low)	ND	1.0	g/L							
1,2,4-Trichlorobenzene	ND	5.0	g/L							
2,4,5-Trichlorophenol	ND	10	g/L							
2,4,6-Trichlorophenol	ND	10	g/L							

Surrogate: 2-Fluorophenol	74.8		µg/L	200		37.4	15-110			
Surrogate: Phenol-d6	47.4		µg/L	200		23.7	15-110			
Surrogate: Nitrobenzene-d5	75.2		µg/L	100		75.2	30-130			
Surrogate: Nitrobenzene-d5 (low)	48.1		µg/L	100		48.1	30-130			
Surrogate: 2-Fluorobiphenyl	78.2		µg/L	100		78.2	30-130			
Surrogate: 2-Fluorobiphenyl (low)	40.6		µg/L	100		40.6	30-130			
Surrogate: 2,4,6-Tribromophenol	157		µg/L	200		78.6	15-110			
Surrogate: p-Terphenyl-d14	85.8		µg/L	100		85.8	30-130			
Surrogate: p-Terphenyl-d14 (low)	37.1		g/L	100		37.1	30-130			

LCS (B114108-BS1)

Prepared: 01/23/15 Analyzed: 01/26/15

Acenaphthene	36.2	5.0	g/L	50.0		72.3	40-140			
Acenaphthene (low)	34.8	7.5	g/L	50.0		69.6	40-140			
Acenaphthylene	35.4	5.0	g/L	50.0		70.7	40-140			
Acenaphthylene (low)	35.4	7.5	g/L	50.0		70.7	40-140			
Acetophenone	32.9	10	g/L	50.0		65.8	40-140			
Aniline	28.3	5.0	g/L	50.0		56.6	40-140			
Anthracene	37.4	5.0	g/L	50.0		74.7	40-140			
Anthracene (low)	37.0	5.0	g/L	50.0		73.9	40-140			
Benzo(a)anthracene	37.2	5.0	g/L	50.0		74.3	40-140			
Benzo(a)anthracene (low)	37.4	1.2	g/L	50.0		74.8	40-140			
Benzo(a)pyrene	37.6	5.0	g/L	50.0		75.1	40-140			
Benzo(a)pyrene (low)	35.6	2.5	g/L	50.0		71.3	40-140			
Benzo(b)fluoranthene	35.6	5.0	g/L	50.0		71.2	40-140			
Benzo(b)fluoranthene (low)	37.1	1.2	g/L	50.0		74.2	40-140			
Benzo(g,h,i)perylene	37.9	5.0	g/L	50.0		75.7	40-140			
Benzo(g,h,i)perylene (low)	35.8	12	g/L	50.0		71.7	40-140			
Benzo(k)fluoranthene	36.2	5.0	g/L	50.0		72.5	40-140			
Benzo(k)fluoranthene (low)	34.7	5.0	g/L	50.0		69.4	40-140			
Bis(2-chloroethoxy)methane	37.4	10	g/L	50.0		74.8	40-140			

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B114108 - SW-846 3510C										
LCS (B114108-BS1)										
					Prepared: 01/23/15 Analyzed: 01/26/15					
Bis(2-chloroethyl)ether	36.8	10	g/L	50.0		73.6	40-140			
Bis(2-chloroisopropyl)ether	34.0	10	g/L	50.0		67.9	40-140			
Bis(2-Ethylhexyl)phthalate	44.5	10	g/L	50.0		89.0	40-140			
4-Bromophenylphenylether	38.5	10	g/L	50.0		77.0	40-140			
Butylbenzylphthalate	40.0	10	g/L	50.0		80.0	40-140			
4-Chloroaniline	31.7	10	g/L	50.0		63.4	15-140			†
2-Chloronaphthalene	32.2	10	g/L	50.0		64.4	40-140			
2-Chlorophenol	30.6	10	g/L	50.0		61.3	30-130			
Chrysene	37.6	5.0	g/L	50.0		75.2	40-140			
Chrysene (low)	37.3	5.0	g/L	50.0		74.6	40-140			
Dibenz(a,h)anthracene	37.6	5.0	g/L	50.0		75.1	40-140			
Dibenz(a,h)anthracene (low)	36.5	5.0	g/L	50.0		73.0	40-140			
Dibenzofuran	36.2	5.0	g/L	50.0		72.3	40-140			
Di-n-butylphthalate	37.4	10	g/L	50.0		74.8	40-140			
1,2-Dichlorobenzene	32.4	5.0	g/L	50.0		64.8	40-140			
1,3-Dichlorobenzene	31.5	5.0	g/L	50.0		62.9	40-140			
1,4-Dichlorobenzene	31.4	5.0	g/L	50.0		62.7	40-140			
3,3-Dichlorobenzidine	39.6	10	g/L	50.0		79.1	40-140			
2,4-Dichlorophenol	34.8	10	g/L	50.0		69.6	30-130			
Diethylphthalate	36.6	10	g/L	50.0		73.2	40-140			
2,4-Dimethylphenol	34.1	10	g/L	50.0		68.3	30-130			
Dimethylphthalate	37.6	10	g/L	50.0		75.1	40-140			
2,4-Dinitrophenol	33.3	10	g/L	50.0		66.6	15-140			†
2,4-Dinitrotoluene	34.9	10	g/L	50.0		69.9	40-140			
2,6-Dinitrotoluene	36.9	10	g/L	50.0		73.7	40-140			
Di-n-octylphthalate	38.8	10	g/L	50.0		77.6	40-140			
1,2-Diphenylhydrazine (as Azobenzene)	38.6	10	g/L	50.0		77.1	40-140			
Fluoranthene	36.2	5.0	g/L	50.0		72.4	40-140			
Fluoranthene (low)	36.5	12	g/L	50.0		73.0	40-140			
Fluorene	36.2	5.0	g/L	50.0		72.3	40-140			
Fluorene (low)	36.6	25	g/L	50.0		73.1	40-140			
Hexachlorobenzene	37.0	10	g/L	50.0		74.0	40-140			
Hexachlorobutadiene	33.7	10	g/L	50.0		67.4	40-140			
Hexachloroethane	32.0	10	g/L	50.0		64.0	40-140			
Indeno(1,2,3-cd)pyrene	36.2	5.0	g/L	50.0		72.3	40-140			
Indeno(1,2,3-cd)pyrene (low)	36.7	5.0	g/L	50.0		73.4	40-140			
Isophorone	48.1	10	g/L	50.0		96.2	40-140			
2-Methylnaphthalene	34.2	5.0	g/L	50.0		68.3	40-140			
2-Methylnaphthalene (low)	37.6	25	g/L	50.0		75.2	40-140			
2-Methylphenol	26.8	10	g/L	50.0		53.5	30-130			
3/4-Methylphenol	24.4	10	g/L	50.0		48.9	30-130			
Naphthalene	33.5	5.0	g/L	50.0		67.0	40-140			
Naphthalene (low)	29.8	25	g/L	50.0		59.6	40-140			
Nitrobenzene	33.5	10	g/L	50.0		67.0	40-140			
2-Nitrophenol	33.6	10	g/L	50.0		67.2	30-130			
4-Nitrophenol	17.0	10	g/L	50.0		34.0	15-140			†
Pentachlorophenol	31.8	10	g/L	50.0		63.5	30-130			
Phenanthrene	37.4	5.0	g/L	50.0		74.9	40-140			
Phenanthrene (low)	35.3	1.2	g/L	50.0		70.6	40-140			
Phenol	11.3	10	g/L	50.0		22.6	15-140			†
Pyrene	39.0	5.0	g/L	50.0		78.0	40-140			
Pyrene (low)	34.8	25	g/L	50.0		69.5	40-140			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B114108 - SW-846 3510C

LCS (B114108-BS1)

Prepared: 01/23/15 Analyzed: 01/26/15

1,2,4-Trichlorobenzene	33.8	5.0	g/L	50.0		67.7	40-140			
2,4,5-Trichlorophenol	34.9	10	g/L	50.0		69.8	30-130			
2,4,6-Trichlorophenol	36.0	10	g/L	50.0		72.0	30-130			
Surrogate: 2-Fluorophenol	72.8		µg/L	200		36.4	15-110			
Surrogate: Phenol-d6	48.3		µg/L	200		24.2	15-110			
Surrogate: Nitrobenzene-d5	71.4		µg/L	100		71.4	30-130			
Surrogate: Nitrobenzene-d5 (low)	51.1		µg/L	100		51.1	30-130			
Surrogate: 2-Fluorobiphenyl	75.8		µg/L	100		75.8	30-130			
Surrogate: 2-Fluorobiphenyl (low)	54.0		µg/L	100		54.0	30-130			
Surrogate: 2,4,6-Tribromophenol	157		µg/L	200		78.4	15-110			
Surrogate: p-Terphenyl-d14	84.6		µg/L	100		84.6	30-130			
Surrogate: p-Terphenyl-d14 (low)	42.8		g/L	100		42.8	30-130			

LCS Dup (B114108-BSD1)

Prepared: 01/23/15 Analyzed: 01/26/15

Acenaphthene	34.3	5.0	g/L	50.0		68.5	40-140	5.40	20	
Acenaphthene (low)	34.0	7.5	g/L	50.0		68.1	40-140	2.25	20	
Acenaphthylene	33.5	5.0	g/L	50.0		67.0	40-140	5.37	20	
Acenaphthylene (low)	34.4	7.5	g/L	50.0		68.9	40-140	2.58	20	
Acetophenone	30.4	10	g/L	50.0		60.9	40-140	7.74	20	
Aniline	25.3	5.0	g/L	50.0		50.5	40-140	11.3	20	
Anthracene	36.0	5.0	g/L	50.0		72.0	40-140	3.65	20	
Anthracene (low)	36.5	5.0	g/L	50.0		73.0	40-140	1.16	20	
Benzo(a)anthracene	36.3	5.0	g/L	50.0		72.6	40-140	2.40	20	
Benzo(a)anthracene (low)	37.3	1.2	g/L	50.0		74.6	40-140	0.268	20	
Benzo(a)pyrene	36.3	5.0	g/L	50.0		72.5	40-140	3.50	20	
Benzo(a)pyrene (low)	35.7	2.5	g/L	50.0		71.4	40-140	0.140	20	
Benzo(b)fluoranthene	34.7	5.0	g/L	50.0		69.3	40-140	2.73	20	
Benzo(b)fluoranthene (low)	37.1	1.2	g/L	50.0		74.2	40-140	0.135	20	
Benzo(g,h,i)perylene	36.4	5.0	g/L	50.0		72.7	40-140	4.07	20	
Benzo(g,h,i)perylene (low)	35.8	12	g/L	50.0		71.5	40-140	0.279	20	
Benzo(k)fluoranthene	35.4	5.0	g/L	50.0		70.8	40-140	2.37	20	
Benzo(k)fluoranthene (low)	34.7	5.0	g/L	50.0		69.4	40-140	0.00	20	
Bis(2-chloroethoxy)methane	34.5	10	g/L	50.0		68.9	40-140	8.18	20	
Bis(2-chloroethyl)ether	34.6	10	g/L	50.0		69.3	40-140	6.10	20	
Bis(2-chloroisopropyl)ether	31.4	10	g/L	50.0		62.8	40-140	7.90	20	
Bis(2-Ethylhexyl)phthalate	43.7	10	g/L	50.0		87.3	40-140	1.91	20	
4-Bromophenylphenylether	36.3	10	g/L	50.0		72.7	40-140	5.85	20	
Butylbenzylphthalate	38.0	10	g/L	50.0		76.0	40-140	5.05	20	
4-Chloroaniline	26.3	10	g/L	50.0		52.7	15-140	18.4	20	†
2-Chloronaphthalene	28.8	10	g/L	50.0		57.6	40-140	11.2	20	
2-Chlorophenol	28.4	10	g/L	50.0		56.8	30-130	7.55	20	
Chrysene	36.7	5.0	g/L	50.0		73.4	40-140	2.45	20	
Chrysene (low)	37.3	5.0	g/L	50.0		74.6	40-140	0.00	20	
Dibenz(a,h)anthracene	36.2	5.0	g/L	50.0		72.4	40-140	3.77	20	
Dibenz(a,h)anthracene (low)	36.4	5.0	g/L	50.0		72.7	40-140	0.412	20	
Dibenzofuran	34.5	5.0	g/L	50.0		69.1	40-140	4.58	20	
Di-n-butylphthalate	36.3	10	g/L	50.0		72.5	40-140	3.04	20	
1,2-Dichlorobenzene	30.3	5.0	g/L	50.0		60.7	40-140	6.60	20	
1,3-Dichlorobenzene	29.1	5.0	g/L	50.0		58.2	40-140	7.73	20	
1,4-Dichlorobenzene	29.3	5.0	g/L	50.0		58.7	40-140	6.62	20	
3,3-Dichlorobenzidine	35.4	10	g/L	50.0		70.8	40-140	11.2	20	
2,4-Dichlorophenol	32.8	10	g/L	50.0		65.6	30-130	5.88	20	

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B114108 - SW-846 3510C										
LCS Dup (B114108-BSD1)										
					Prepared: 01/23/15 Analyzed: 01/26/15					
Diethylphthalate	35.3	10	g/L	50.0		70.5	40-140	3.65	20	
2,4-Dimethylphenol	31.8	10	g/L	50.0		63.6	30-130	7.04	20	
Dimethylphthalate	36.0	10	g/L	50.0		72.0	40-140	4.30	20	
2,4-Dinitrophenol	31.6	10	g/L	50.0		63.3	15-140	5.14	20	†
2,4-Dinitrotoluene	34.2	10	g/L	50.0		68.4	40-140	2.05	20	
2,6-Dinitrotoluene	35.6	10	g/L	50.0		71.2	40-140	3.48	20	
Di-n-octylphthalate	37.8	10	g/L	50.0		75.6	40-140	2.61	20	
1,2-Diphenylhydrazine (as Azobenzene)	36.0	10	g/L	50.0		72.1	40-140	6.76	20	
Fluoranthene	35.6	5.0	g/L	50.0		71.1	40-140	1.81	20	
Fluoranthene (low)	35.9	12	g/L	50.0		71.8	40-140	1.59	20	
Fluorene	34.6	5.0	g/L	50.0		69.3	40-140	4.27	20	
Fluorene (low)	35.5	25	g/L	50.0		71.0	40-140	2.84	20	
Hexachlorobenzene	36.0	10	g/L	50.0		72.1	40-140	2.57	20	
Hexachlorobutadiene	31.7	10	g/L	50.0		63.4	40-140	6.02	20	
Hexachloroethane	29.6	10	g/L	50.0		59.2	40-140	7.85	20	
Indeno(1,2,3-cd)pyrene	35.1	5.0	g/L	50.0		70.2	40-140	2.89	20	
Indeno(1,2,3-cd)pyrene (low)	36.3	5.0	g/L	50.0		72.6	40-140	1.16	20	
Isophorone	43.1	10	g/L	50.0		86.3	40-140	10.9	20	
2-Methylnaphthalene	32.4	5.0	g/L	50.0		64.9	40-140	5.20	20	
2-Methylnaphthalene (low)	35.2	25	g/L	50.0		70.4	40-140	6.60	20	
2-Methylphenol	24.8	10	g/L	50.0		49.5	30-130	7.73	20	
3/4-Methylphenol	22.2	10	g/L	50.0		44.4	30-130	9.65	20	
Naphthalene	31.6	5.0	g/L	50.0		63.2	40-140	5.71	20	
Naphthalene (low)	28.7	25	g/L	50.0		57.4	40-140	3.68	20	
Nitrobenzene	31.7	10	g/L	50.0		63.4	40-140	5.55	20	
2-Nitrophenol	31.5	10	g/L	50.0		63.0	30-130	6.46	20	
4-Nitrophenol	15.8	10	g/L	50.0		31.7	15-140	7.13	20	†
Pentachlorophenol	29.8	10	g/L	50.0		59.6	30-130	6.30	20	
Phenanthrene	35.8	5.0	g/L	50.0		71.5	40-140	4.54	20	
Phenanthrene (low)	35.2	1.2	g/L	50.0		70.4	40-140	0.283	20	
Phenol	10.2	10	g/L	50.0		20.5	15-140	9.75	20	†
Pyrene	37.2	5.0	g/L	50.0		74.5	40-140	4.57	20	
Pyrene (low)	35.2	25	g/L	50.0		70.3	40-140	1.14	20	
1,2,4-Trichlorobenzene	32.2	5.0	g/L	50.0		64.3	40-140	5.12	20	
2,4,5-Trichlorophenol	33.1	10	g/L	50.0		66.2	30-130	5.21	20	
2,4,6-Trichlorophenol	33.5	10	g/L	50.0		67.1	30-130	7.10	20	
Surrogate: 2-Fluorophenol	64.9		µg/L	200		32.5	15-110			
Surrogate: Phenol-d6	43.0		µg/L	200		21.5	15-110			
Surrogate: Nitrobenzene-d5	65.7		µg/L	100		65.7	30-130			
Surrogate: Nitrobenzene-d5 (low)	47.6		µg/L	100		47.6	30-130			
Surrogate: 2-Fluorobiphenyl	70.4		µg/L	100		70.4	30-130			
Surrogate: 2-Fluorobiphenyl (low)	52.3		µg/L	100		52.3	30-130			
Surrogate: 2,4,6-Tribromophenol	151		µg/L	200		75.7	15-110			
Surrogate: p-Terphenyl-d14	78.4		µg/L	100		78.4	30-130			
Surrogate: p-Terphenyl-d14 (low)	40.3		g/L	100		40.3	30-130			

QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B114348 - SW-846 3510C										
Blank (B114348-BLK1)										
Prepared: 01/29/15 Analyzed: 01/30/15										
Aroclor-1016	ND	0.20	g/L							V-20
Aroclor-1016 2C]	ND	0.20	g/L							
Aroclor-1221	ND	0.20	g/L							
Aroclor-1221 2C]	ND	0.20	g/L							
Aroclor-1232	ND	0.20	g/L							
Aroclor-1232 2C]	ND	0.20	g/L							
Aroclor-1242	ND	0.20	g/L							
Aroclor-1242 2C]	ND	0.20	g/L							
Aroclor-1248	ND	0.20	g/L							
Aroclor-1248 2C]	ND	0.20	g/L							
Aroclor-1254	ND	0.20	g/L							
Aroclor-1254 2C]	ND	0.20	g/L							
Aroclor-1260	ND	0.20	g/L							V-20
Aroclor-1260 2C]	ND	0.20	g/L							
Aroclor-1262	ND	0.20	g/L							
Aroclor-1262 2C]	ND	0.20	g/L							
Aroclor-1268	ND	0.20	g/L							
Aroclor-1268 2C]	ND	0.20	g/L							
Surrogate: Decachlorobiphenyl	1.80		g/L	2.00		90.1	30-150			
Surrogate: Decachlorobiphenyl 2C]	1.81		g/L	2.00		90.3	30-150			
Surrogate: Tetrachloro-m-xylene	1.83		g/L	2.00		91.4	30-150			
Surrogate: Tetrachloro-m-xylene 2C]	1.57		g/L	2.00		78.3	30-150			
LCS (B114348-BS1)										
Prepared: 01/29/15 Analyzed: 01/30/15										
Aroclor-1016	0.63	0.20	g/L	0.500		127	40-140			V-06
Aroclor-1016 2C]	0.60	0.20	g/L	0.500		119	40-140			
Aroclor-1260	0.71	0.20	g/L	0.500		143	40-140			L-02, V-06
Aroclor-1260 2C]	0.57	0.20	g/L	0.500		113	40-140			
Surrogate: Decachlorobiphenyl	1.76		g/L	2.00		88.0	30-150			
Surrogate: Decachlorobiphenyl 2C]	1.73		g/L	2.00		86.3	30-150			
Surrogate: Tetrachloro-m-xylene	1.49		g/L	2.00		74.4	30-150			
Surrogate: Tetrachloro-m-xylene 2C]	1.27		g/L	2.00		63.4	30-150			
LCS Dup (B114348-BSD1)										
Prepared: 01/29/15 Analyzed: 01/30/15										
Aroclor-1016	0.73	0.20	g/L	0.500		147	40-140	14.6	20	L-07, V-06
Aroclor-1016 2C]	0.65	0.20	g/L	0.500		130	40-140	8.78	20	
Aroclor-1260	0.73	0.20	g/L	0.500		146	40-140	2.31	20	L-02, V-06
Aroclor-1260 2C]	0.61	0.20	g/L	0.500		122	40-140	7.64	20	
Surrogate: Decachlorobiphenyl	1.77		g/L	2.00		88.4	30-150			
Surrogate: Decachlorobiphenyl 2C]	1.87		g/L	2.00		93.5	30-150			
Surrogate: Tetrachloro-m-xylene	1.67		g/L	2.00		83.6	30-150			
Surrogate: Tetrachloro-m-xylene 2C]	1.42		g/L	2.00		71.2	30-150			

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B114041 - SW-846 3005A

Blank (B114041-BLK1)

Prepared: 01/22/15 Analyzed: 01/23/15

Antimony	ND	5.0	g/L							
Arsenic	ND	2.0	g/L							
Cadmium	ND	2.5	g/L							
Chromium	ND	5.0	g/L							
Copper	ND	25	g/L							
Lead	ND	5.0	g/L							
Nickel	ND	25	g/L							
Selenium	ND	25	g/L							
Silver	ND	2.5	g/L							
Zinc	ND	50	g/L							

LCS (B114041-BS1)

Prepared: 01/22/15 Analyzed: 01/23/15

Antimony	271	5.0	g/L	250		108	80-120			
Arsenic	261	2.0	g/L	250		104	80-120			
Cadmium	269	2.5	g/L	250		108	80-120			
Chromium	267	5.0	g/L	250		107	80-120			
Copper	277	25	g/L	250		111	80-120			
Lead	278	5.0	g/L	250		111	80-120			
Nickel	268	25	g/L	250		107	80-120			
Selenium	276	25	g/L	250		110	80-120			
Silver	274	2.5	g/L	250		110	80-120			
Zinc	271	50	g/L	250		109	80-120			

LCS Dup (B114041-BSD1)

Prepared: 01/22/15 Analyzed: 01/23/15

Antimony	276	5.0	g/L	250		111	80-120	2.05	20	
Arsenic	264	2.0	g/L	250		106	80-120	1.22	20	
Cadmium	274	2.5	g/L	250		110	80-120	1.65	20	
Chromium	264	5.0	g/L	250		106	80-120	1.20	20	
Copper	289	25	g/L	250		115	80-120	3.91	20	
Lead	279	5.0	g/L	250		112	80-120	0.281	20	
Nickel	271	25	g/L	250		108	80-120	1.08	20	
Selenium	272	25	g/L	250		109	80-120	1.47	20	
Silver	292	2.5	g/L	250		117	80-120	6.30	20	
Zinc	276	50	g/L	250		111	80-120	1.80	20	

Batch B114094 - SW-846 7470A Prep

Blank (B114094-BLK1)

Prepared: 01/23/15 Analyzed: 01/26/15

Mercury	ND	0.00010	mg/L							
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LCS (B114094-BS1)

Prepared: 01/23/15 Analyzed: 01/26/15

Mercury	0.00190	0.00010	mg/L	0.00200		95.2	80-120			
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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B114094 - SW-846 7470A Prep										
LCS Dup (B114094-BSD1)				Prepared: 01/23/15 Analyzed: 01/26/15						
Mercury	0.00189	0.00010	mg/L	0.00200		94.6	80-120	0.597	20	
Batch B114154 - SW-846 3005A										
Blank (B114154-BLK1)				Prepared: 01/24/15 Analyzed: 01/26/15						
Iron	ND	0.050	mg/L							
LCS (B114154-BS1)				Prepared: 01/24/15 Analyzed: 01/26/15						
Iron	1.97	0.050	mg/L	2.00		98.5	80-120			
LCS Dup (B114154-BSD1)				Prepared: 01/24/15 Analyzed: 01/26/15						
Iron	1.98	0.050	mg/L	2.00		99.2	80-120	0.697	20	

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B114040 - SM21-22 4500 CL G										
Blank (B114040-BLK1)				Prepared & Analyzed: 01/22/15						
Chlorine, Residual	ND	0.020	mg/L							
LCS (B114040-BS1)				Prepared & Analyzed: 01/22/15						
Chlorine, Residual	1.5	0.020	mg/L	1.25		117	81.9-127			
LCS Dup (B114040-BSD1)				Prepared & Analyzed: 01/22/15						
Chlorine, Residual	1.5	0.020	mg/L	1.25		118	81.9-127	0.936	9.61	
Duplicate (B114040-DUP1)				Source: 15A0697-01		Prepared & Analyzed: 01/22/15				
Chlorine, Residual	0.064	0.020	mg/L		0.036			55.2	52.6	R-04
Matrix Spike (B114040-MS1)				Source: 15A0697-01		Prepared & Analyzed: 01/22/15				
Chlorine, Residual	1.2	0.020	mg/L	1.00	0.036	115	10-183			
Reference (B114040-SRM1)				Prepared & Analyzed: 01/22/15						
Chlorine, Residual	1.01	0.020	mg/L	1.00		101	0-200			
Batch B114042 - SW-846 7196A										
Blank (B114042-BLK1)				Prepared & Analyzed: 01/22/15						
Hexavalent Chromium	ND	0.0040	mg/L							
LCS (B114042-BS1)				Prepared & Analyzed: 01/22/15						
Hexavalent Chromium	0.10	0.0040	mg/L	0.100		105	80-120			
LCS Dup (B114042-BSD1)				Prepared & Analyzed: 01/22/15						
Hexavalent Chromium	0.10	0.0040	mg/L	0.100		105	80-120	0.00	20	
Duplicate (B114042-DUP1)				Source: 15A0697-01		Prepared & Analyzed: 01/22/15				
Hexavalent Chromium	0.0040	0.0040	mg/L		0.0040			0.00	20	
Matrix Spike (B114042-MS1)				Source: 15A0697-01		Prepared & Analyzed: 01/22/15				
Hexavalent Chromium	0.11	0.0040	mg/L	0.100	0.0040	103	75-125			
Matrix Spike Dup (B114042-MSD1)				Source: 15A0697-01		Prepared & Analyzed: 01/22/15				
Hexavalent Chromium	0.11	0.0040	mg/L	0.100	0.0040	107	75-125	3.50	20	
Batch B114105 - SM21-22 2540D										
Blank (B114105-BLK1)				Prepared & Analyzed: 01/23/15						
Total Suspended Solids	ND	2.5	mg/L							

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B114105 - SM21-22 2540D										
LCS (B114105-BS1)				Prepared & Analyzed: 01/23/15						
Total Suspended Solids	168	10	mg/L	200		84.0	74.6-112			
Batch B114247 - EPA 420.1										
Blank (B114247-BLK1)				Prepared: 01/28/15 Analyzed: 01/29/15						
Phenol	ND	0.050	mg/L							
LCS (B114247-BS1)				Prepared: 01/28/15 Analyzed: 01/29/15						
Phenol	0.56	0.050	mg/L	0.500		112	76.2-127			
LCS Dup (B114247-BSD1)				Prepared: 01/28/15 Analyzed: 01/29/15						
Phenol	0.59	0.050	mg/L	0.500		119	76.2-127	5.60	11.4	
Matrix Spike (B114247-MS1)				Source: 15A0697-01			Prepared: 01/28/15 Analyzed: 01/29/15			
Phenol	0.36	0.050	mg/L	0.500	0.052	61.5	42.6-140			
Reference (B114247-SRM1)				Prepared: 01/28/15 Analyzed: 01/29/15						
Phenol	0.514	0.050	mg/L	0.500		103	0-200			
Batch B114287 - SM21-22 4500 CL B										
Blank (B114287-BLK1)				Prepared & Analyzed: 01/28/15						
Chloride	ND	1.0	mg/L							
LCS (B114287-BS1)				Prepared & Analyzed: 01/28/15						
Chloride	11	1.0	mg/L	11.3		99.0	81.5-116			
LCS Dup (B114287-BSD1)				Prepared & Analyzed: 01/28/15						
Chloride	11	1.0	mg/L	11.3		99.0	81.5-116	0.00	8.97	
Batch B114361 - EPA 1664B										
Blank (B114361-BLK1)				Prepared & Analyzed: 01/29/15						
Silica Gel Treated HEM (SGT-HEM)	ND	1.4	mg/L							
LCS (B114361-BS1)				Prepared & Analyzed: 01/29/15						
Silica Gel Treated HEM (SGT-HEM)	16		mg/L	20.0		77.5	64-132			
Batch B114420 - SW-846 9014										
Blank (B114420-BLK1)				Prepared: 01/28/15 Analyzed: 01/29/15						
Cyanide	ND	0.010	mg/L							

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B114420 - SW-846 9014										
LCS (B114420-BS1)				Prepared: 01/28/15 Analyzed: 01/29/15						
Cyanide	0.65	0.010	mg/L	0.636		102	80-120			
LCS Dup (B114420-BSD1)				Prepared: 01/28/15 Analyzed: 01/29/15						
Cyanide	0.65	0.010	mg/L	0.636		102	80-120	0.425	20	

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QUALITY CONTROL

Drinking Water Organics EPA 504.1 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B114084 - EPA 504 water										
Blank (B114084-BLK1)										
Prepared & Analyzed: 01/23/15										
1,2-Dibromoethane (EDB)	ND	0.020	g/L							
1,2-Dibromoethane (EDB) 2C]	ND	0.020	g/L							
Surrogate: 1,3-Dibromopropane	0.968		g/L	1.00		96.8	70-130			
Surrogate: 1,3-Dibromopropane 2C]	0.938		g/L	1.00		93.8	70-130			
LCS (B114084-BS1)										
Prepared & Analyzed: 01/23/15										
1,2-Dibromoethane (EDB)	0.150	0.020	g/L	0.175		85.7	70-130			
1,2-Dibromoethane (EDB) 2C]	0.180	0.020	g/L	0.175		103	70-130			
Surrogate: 1,3-Dibromopropane	1.01		g/L	1.00		101	70-130			
Surrogate: 1,3-Dibromopropane 2C]	0.991		g/L	1.00		99.1	70-130			
LCS Dup (B114084-BSD1)										
Prepared & Analyzed: 01/23/15										
1,2-Dibromoethane (EDB)	0.146	0.020	g/L	0.175		83.4	70-130	2.70		
1,2-Dibromoethane (EDB) 2C]	0.177	0.020	g/L	0.175		101	70-130	1.68		
Surrogate: 1,3-Dibromopropane	1.02		g/L	1.00		102	70-130			
Surrogate: 1,3-Dibromopropane 2C]	1.01		g/L	1.00		101	70-130			

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**
EPA 504.1

LCS Dup

Lab Sample ID: B114084-BSD1 Date(s) Analyzed: 01/23/2015 01/23/2015

Instrument ID (1): _____ Instrument ID (2): _____

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
1,2-Dibromoethane (EDB)	1	2.21	0.00	0.00	0.146	
	2	2.66	0.00	0.00	0.177	19

FLAG/QUALIFIER SUMMARY

	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
R-04	Duplicate relative percent difference (RPD) is a less useful indicator of sample precision for sample results that are <5 times the reporting limit (RL).
RL-07	Elevated reporting limit based on lowest point in calibration.
	MA CAM reporting limit not met.
S-07	One associated surrogate standard recovery is outside of control limits but the other(s) is/are within limits. All recoveries are > 10%.
V-06	Continuing calibration did not meet method specifications and was biased on the high side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the high side.
V-20	Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 420.1 in Water	
Phenol	CT,MA,NH,NY,RI,NC,ME,VA,NJ
SM21-22 2540D in Water	
Total Suspended Solids	CT,MA,NH,NY,RI,NC,ME,VA,NJ
SM21-22 3500 Cr B in Water	
Hexavalent Chromium	NY,CT,NH,RI,ME,VA,NJ,NC
SM21-22 4500 CL B in Water	
Chloride	NH,CT,MA,NY,RI,NC,ME,VA,NJ
SM21-22 4500 CL G in Water	
Chlorine, Residual	CT,MA,RI,ME
SW-846 6010C in Water	
Iron	CT,NH,NY,ME,NC,VA,NJ
SW-846 6020A in Water	
Antimony	CT,NH,NY,NC,ME,VA,NJ
Arsenic	CT,NH,NY,NC,ME,VA,NJ
Cadmium	CT,NH,NY,RI,NC,ME,VA,NJ
Chromium	CT,NH,NY,NC,ME,VA,NJ
Copper	CT,NH,NY,NC,ME,VA,NJ
Lead	CT,NH,NY,NC,ME,VA,NJ
Nickel	CT,NH,NY,NC,ME,VA,NJ
Selenium	CT,NH,NY,NC,ME,VA,NJ
Silver	CT,NH,NY,NC,ME,VA,NJ
Zinc	CT,NH,NY,NC,ME,VA,NJ
SW-846 7196A in Water	
Hexavalent Chromium	CT,NH,NY,NC,ME,VA,NJ
SW-846 7470A in Water	
Mercury	CT,NH,NY,NC,ME,VA,NJ
SW-846 8082A in Water	
Aroclor-1016	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1016 2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1221	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1221 2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1232	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1232 2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1242	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1242 2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1248	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1248 2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1254	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1254 2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1260	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1260 2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1262	NC
Aroclor-1262 2C]	NC
Aroclor-1268	NC

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8082A in Water	
Aroclor-1268 2C]	NC
SW-846 8270D in Water	
Aniline	CT,NY
Bis(2-chloroethoxy)methane	CT,NY,NH
Bis(2-chloroethyl)ether	CT,NY,NH
Bis(2-chloroisopropyl)ether	CT,NY,NH
Bis(2-Ethylhexyl)phthalate	CT,NY,NH
4-Bromophenylphenylether	CT,NY,NH
Butylbenzylphthalate	CT,NY,NH
4-Chloroaniline	CT,NY,NH
2-Chloronaphthalene	CT,NY,NH
2-Chlorophenol	CT,NY,NH
Dibenzofuran	CT,NY,NH
Di-n-butylphthalate	CT,NY,NH
1,2-Dichlorobenzene	CT,NY,NH
1,3-Dichlorobenzene	CT,NY,NH
1,4-Dichlorobenzene	CT,NY,NH
3,3-Dichlorobenzidine	CT,NY,NH
2,4-Dichlorophenol	CT,NY,NH
Diethylphthalate	CT,NY,NH
2,4-Dimethylphenol	CT,NY,NH
Dimethylphthalate	CT,NY,NH
2,4-Dinitrophenol	CT,NY,NH
2,4-Dinitrotoluene	CT,NY,NH
2,6-Dinitrotoluene	CT,NY,NH
Di-n-octylphthalate	CT,NY,NH
Hexachlorobenzene	CT,NY,NH
Hexachlorobutadiene	CT,NY,NH
Hexachloroethane	CT,NY,NH
Isophorone	CT,NY,NH
2-Methylphenol	CT,NY,NH
3/4-Methylphenol	CT,NY,NH
Nitrobenzene	CT,NY,NH
2-Nitrophenol	CT,NY,NH
4-Nitrophenol	CT,NY,NH
Pentachlorophenol	CT,NY,NH
Phenol	CT,NY,NH
1,2,4-Trichlorobenzene	CT,NY,NH
2,4,5-Trichlorophenol	CT,NY,NH
2,4,6-Trichlorophenol	CT,NY,NH
SW-846 9014 in Water	
Cyanide	NY,CT,NH,NC,ME,VA,NJ

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2015
CT	Connecticut Department of Public Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2015
NC	North Carolina Div. of Water Quality	652	12/31/2015
NJ	New Jersey DEP	MA007 NELAP	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2015
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2015

39 Spruce St.
 East Longmeadow, MA. 01028
 P: 413-525-2332
 F: 413-525-6405
 www.contestlabs.com



Sample Receipt Checklist

CLIENT NAME: Resource Controls RECEIVED BY: JDL DATE: 1/22/15

- 1) Was the chain(s) of custody relinquished and signed? Yes No No CoC Included
- 2) Does the chain agree with the samples? Yes No
 If not, explain: _____
- 3) Are all the samples in good condition? Yes No
 If not, explain: _____

4) How were the samples received:
 On Ice Direct from Sampling Ambient In Cooler(s)
 Were the samples received in Temperature Compliance of (2-6°C)? Yes No N/A
 Temperature °C by Temp blank _____ Temperature °C by Temp gun 2.3

5) Are there Dissolved samples for the lab to filter? Yes No
 Who was notified _____ Date _____ Time _____

6) Are there any RUSH or SHORT HOLDING TIME samples? Yes No
 Who was notified David Date 1/22/15 Time 1630

7) Location where samples are stored: 19

Permission to subcontract samples? Yes No
 (Walk-in clients only) if not already approved
 Client Signature: _____

8) Do all samples have the proper Acid pH: Yes No N/A _____

9) Do all samples have the proper Base pH: Yes No N/A _____

10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No N/A

Containers received at Con-Test

	# of containers			# of containers
1 Liter Amber	6		8 oz amber/clear jar	
500 mL Amber	1		4 oz amber/clear jar	
250 mL Amber (8oz amber)			2 oz amber/clear jar	
1 Liter Plastic			Plastic Bag / Ziploc	
500 mL Plastic	2		SOC Kit	
250 mL plastic	2		Non-ConTest Container	
40 mL Vial - type listed below	3		Perchlorate Kit	
Colisure / bacteria bottle			Flashpoint bottle	
Dissolved Oxygen bottle			Other glass jar	
Encore			Other	

Laboratory Comments:

40 mL vials: # HCl 3 # Methanol _____
 # Bisulfate _____ # DI Water _____
 # Thiosulfate _____ Unpreserved _____

Time and Date Frozen: _____

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Login Sample Receipt Checklist**(Rejection Criteria Listing - Using Sample Acceptance Policy)****Any False statement will be brought to the attention of Client**

<u>Question</u>	<u>Answer (True/False)</u>		<u>Comment</u>
	T	F/NA	
1) The cooler's custody seal, if present, is intact.		NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T		
3) Samples were received on ice.	T		
4) Cooler Temperature is acceptable.	T		
5) Cooler Temperature is recorded.	T		
6) COC is filled out in ink and legible.	T		
7) COC is filled out with all pertinent information.	T		
8) Field Sampler's name present on COC.	T		
9) There are no discrepancies between the sample IDs on the container and the COC.	T		
10) Samples are received within Holding Time.	T		
11) Sample containers have legible labels.	T		
12) Containers are not broken or leaking.	T		
13) Air Cassettes are not broken/open.		NA	
14) Sample collection date/times are provided.	T		
15) Appropriate sample containers are used.	T		
16) Proper collection media used.	T		
17) No headspace sample bottles are completely filled.	T		
18) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	T		
19) Trip blanks provided if applicable.		NA	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	T		
21) Samples do not require splitting or compositing.	T		

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Who notified of False statements?

Log-In Technician Initials: JDL

Date/Time:

Date/Time: 1/22/15 1630