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

CERTIFIED MAIL

January 19, 2011

Jim Redmond
Assistant Chief Operator
CH2MHILL
1748 West Truck Road
Otis ANG Base, MA 02542

Re: Authorization to discharge under the Remediation General Permit (RGP) – MAG910000. Former Bull HN Information Systems Inc., site located at 5 Guest Street, Brighton, MA 02135, Suffolk County; Authorization # MAG910076 - Reissuance

Dear Mr. Redmond:

Based on the review of your Notice of Intent (NOI) submitted on behalf of Honeywell International Inc., by the firm CH2MHILL, 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 for 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 check list 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 that based on the historic presence of contamination at the site we are retaining pollutants 1,2 Dichloroethane (DCA), 1,1,2 Trichloro-ethane (TCA) and Total Polychlorinated Biphenyls, to be monitored at the site.

Also, please note that the metals copper, and nickel and iron are included in the list. Copper, nickel and iron were included because you have marked these believed present in

the NOI application. These pollutants are dilution dependent subject to limitations based on a dilution factor range (DFR), due to the ample dilution at the point of discharge (177) the DFR applicable for this pollutant is greater than one hundred (>100). (See the RGP Appendix IV for Massachusetts facilities). Therefore, the limit for copper of 520 ug/L, nickel of 2,380ug/L and iron of 5,000ug/L, shall not be exceeded in the discharge.

Additionally, please note the list 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. Recertification's 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. This project reportedly will terminate on September 9, 2015. If for any reason the discharge terminates sooner 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,

David M. Webster, Chief
Industrial Permits Branch

Enclosure

cc: Kathleen Keohane, MassDEP
Lynne Tseng, CH2MHILL

2010 Remediation General Permit
Summary of Monitoring Parameters[1]

NPDES Permit Number:	**MAG910076- Reissuance**
Date Permit Issued:	January, 2011
Facility/Site Name:	Former Bull HN Information Systems Inc.
Facility/Site Address:	5 Guest Street, Brighton, MA 02135, Suffolk County
	Email address of owner:Prashant.Gupta@Honeywell.com; Phone n:804-530-6211
Legal Name of operator:	CH2MHILL
Operator contact name, title, and Address:	Jim Redmond, Assistant Chief Operator , 1748 West Truck Road Otis ANG Base, MA 02542 ; james.redmond@ch2m.com
	Email: james.redmond@ch2m.com
Estimated Date of Completion:	September 9, 2015
Category and Sub-Category:	Category II- Non Petroleum Site Remediation. Sub-category A. Volatile Organic Compound Only Sites
Receiving Water:	Drainage System to Charles River

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

	Parameter	**Effluent Limit/Method#/ML** (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	1. Total Suspended Solids (TSS)	30 milligrams/liter (mg/L) **, 50 mg/L for hydrostatic testing **, Me#60.2/ML 5ug/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 5ug/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
	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

	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)
	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/ ML5ug/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/ML5ug/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
	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

	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)
	d. Benzo(k)Fluoranthene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	e. Chrysene [7]	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	f. Dibenzo(a,h)anthracene [7]	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	g. Indeno(1,2,3-cd) Pyrene [7]	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML5ug/L
	36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/L
	h. Acenaphthene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	i. Acenaphthylene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	j. Anthracene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	k. Benzo(ghi) Perylene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	l. Fluoranthene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	m. Fluorene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	n. Naphthalene [5]	20 ug/l / Me#8270/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	o. Phenanthrene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	p. Pyrene	X/Me#8270D/ML5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	37. Total Polychlorinated Biphenyls (PCBs) [8, 9]	0.000064 ug/L/Me# 608/ ML 0.5 ug/L
√	38. Chloride	Monitor only/Me# 300.0/ ML 0.1ug/L

	Metal parameter	Total Recoverable Metal Limit @ H [10]= 50 mg/l CaCO3 for discharges in Massachusetts (ug/l) [11]			
		Freshwater	Saltwater		
	39. Antimony	5.6/10mL			
	40. Arsenic **	10/20mL	36/20mL		
	41. Cadmium **	0.2/10ml	8.9/10mL		
	42. Chromium III (trivalent) **	48.8/15mL	100/15mL		
	43. Chromium VI (hexavalent) **	11.4/10mL	50.3/10mL		

	Metal parameter	Total Recoverable Metal Limit @ H [10]= 50 mg/l CaCO3 for discharges in Massachusetts (ug/l) [11]			
		Freshwater	Saltwater		
√	44. Copper **	520/15mL	3.7/15mL		
	45. Lead **	1.3/20mL	8.5/20mL		
	46. Mercury **	0.9/0.2mL	1.1/0.2mL		
√	47. Nickel **	2,380/20mL	8.2/20mL		
	48. Selenium **	5/20mL	71/20mL		
	49. Silver	1.2/10mL	2.2/10mL		
	50. Zinc **	66.6/15mL	85.6/15mL		
√	51. Iron	5,000/20mL			

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

Footnotes:

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

CH2M HILL
25 New Chardon Street
Suite 300
Boston, MA 02114
Tel 617.523.2002
Fax 617.723.9036

November 23, 2010

US Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code OEP06-4
Boston, MA 02109-3912
ATTN: Remediation General Permit NOI Processing

RE: Remediation General Permit Applications
Former Bull HN Information Systems, Inc. Facility
Brighton, Massachusetts

To Whom It May Concern,

On behalf of Honeywell International Inc., CH2M HILL has prepared this Notice of Intent (NOI) for a reapplication for coverage under the Massachusetts Remediation General Permit (RGP) for the Migration Control (MC) groundwater extraction and treatment system located at the corner of Guest Street and Life Street in Brighton, Massachusetts. The location of the site is shown on Figure 1. The treated water from the MC system is discharged into a municipal storm drainage system that ultimately discharges to the Charles River. The MC System is currently covered under the Massachusetts Remediation General Permit (RGP) #MAG910076. On September 9, 2010, the US Environmental Protection Agency published an updated permit (referred to as 2010 RGP). In accordance with the Massachusetts 2010 RGP, operators that are currently operating under the 2005 RGP must re-apply for coverage by submitting an NOI under the updated 2010 RGP.

The MC groundwater extraction and treatment system is expected to be classified as a Category II - Non-Petroleum Site Remediation (Subcategory A - VOC-Only Site) system under the RGP. The influent to the MC system was sampled in September 2010 for the constituents listed in Appendix III of the RGP. Sampling results are included within this NOI.

If you require any additional information or would like to discuss the plans for this system, please contact either of the undersigned at (617) 626-2000.

Sincerely,

Lynne Tseng
Project Manager

John D. Rendall, P.E., L.S.P., L.E.P.
Vice President

encl: Figure 1: Site Location
Figure 2: Boston Utility Drainage Area Map
Figure 3: Migration Control Treatment System Design
Figure 4: Water Supply Protection Area
Exhibit 1: Laboratory Analytical Report
Exhibit 2: Dilution Factor Calculations
Exhibit 3: MSDS Sheets
Exhibit 4: Fish and Wildlife Services Species of Concern

cc: Mr. Prashant Gupta, Honeywell International Inc.
Mr. George Papadopoulos, EPA New England
Massachusetts Department of Environmental Protection

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**: Former Bull HN Information Systems		**Facility/site** mailing address:		
Location of **facility/site**: longitude: -71.146199 latitude: 42.356982	Facility SIC code(s): (Remediation)	Street: 5 Guest Street		
b) Name of **facility/site owner:**		Town: Brighton 02135		
Email address of facility/site owner: Prashant.Gupta@Honeywell.com		State: MA	Zip: 02135	County: Suffolk
Telephone no. of facility/site **owner**: 804-530-6211				
Fax no. of facility/site **owner**:		**Owner** is (check one): 1. Federal ○ 2. State/Tribal ○ 3. Private ◉ 4. Other ○ if so, describe:		
Address of **owner** (if different from site):				
Street: Building 1-1-21 4101 Bermuda Hundred Road				
Town: Chester	State: VA	Zip: 23836	County: Chesterfield	
c) Legal name of **operator**:		**Operator** telephone no: 508-968-4670		
James Redmond	**Operator** fax no.:		**Operator** email: james.redmond@ch2m.com	
Operator contact name and title: Jim Redmond/Assistant Chief Operator				
Address of **operator** (if different from owner):	Street: 1748 West Truck Road			
Town: Otis ANG Base	State: MA	Zip: 02542	County: Barnstable	

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 #: Permit #MAG910076
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: RTN 3-0000158
2. permit or license # assigned:
3. state agency contact information: name, location, and telephone number:

Massachusetts Department of Environmental Protection
One Winter Street
Boston, MA 02108, 617-292-5500

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

g) Is the site/facility located within or does it discharge to an Area of Critical Environmental Concern (ACEC)? Y ○ N ◉

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

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

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

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

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

Discharge of treated groundwater from a groundwater treatment system to prevent further migration and reduce the mass of chlorinated volatile organic compounds in groundwater.

b) Provide the following information about each discharge:

1) Number of discharge points: 1

2) What is the **maximum** and **average flow rate** of discharge (in cubic feet per second, ft^3/s)?
Max. flow 0.1338 Is maximum flow a **design value**? Y ◉ N ○
Average flow (include units) 0.033 cfs Is average flow a design value or estimate? Actual

3) Latitude and longitude of each discharge within 100 feet:
pt.1: lat 42.356747 long 71.147594 pt.2: lat. ____ long. ____;
pt.3: lat ____ long ____ pt.4: lat. ____ long. ____;
pt.5: lat ____ long ____ pt.6: lat. ____ long. ____;
pt.7: lat ____ long ____ pt.8: lat. ____ long. ____; etc.

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

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

c) Expected dates of discharge (mm/dd/yy): start Sep 9, 2010 end Sep 9, 2015

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). See Attached Drawing

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)		☒	☐								
2. Total Residual Chlorine (TRC)		☒	☐								
3. Total Petroleum Hydrocarbons (TPH)		☒	☐								
4. Cyanide (CN)	57125	☒	☐								
5. Benzene (B)	71432	☒	☐								
6. Toluene (T)	108883	☒	☐								
7. Ethylbenzene (E)	100414	☒	☐								
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐								
9. Total BTEX [2]	n/a	☒	☐								
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) [3]	106934	☒	☐								
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐								
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐								

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

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

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

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
13. tert-Amyl Methyl Ether (TAME)	9940508	☒	☐								
14. Naphthalene	91203	☒	☐								
15. Carbon Tetrachloride	56235	☒	☐								
16. 1,2 Dichlorobenzene (o-DCB)	95501	☒	☐								
17. 1,3 Dichlorobenzene (m-DCB)	541731	☒	☐								
18. 1,4 Dichlorobenzene (p-DCB)	106467	☒	☐								
18a. Total dichlorobenzene		☒	☐								
19. 1,1 Dichloroethane (DCA)	75343	☐	☒	1	grab	E624	1 ug/L	36.9	0.012	36.9	0.0030
20. 1,2 Dichloroethane (DCA)	107062	☒	☐								
21. 1,1 Dichloroethene (DCE)	75354	☐	☒	1	grab	E624	1 ug/L	201	0.066	201	0.016
22. cis-1,2 Dichloroethene (DCE)	156592	☐	☒	1	grab	E624	5 ug/L	32	0.010	32	0.0026
23. Methylene Chloride	75092	☒	☐								
24. Tetrachloroethene (PCE)	127184	☐	☒	1	grab	E624	1 ug/L	4.8	0.0016	4.8	0.00039
25. 1,1,1 Trichloro-ethane (TCA)	71556	☐	☒	1	grab	E624	10 ug/L	1460	0.48	1460	0.12
26. 1,1,2 Trichloro-ethane (TCA)	79005	☒	☐								
27. Trichloroethene (TCE)	79016	☐	☒	1	grab	E624	10 ug/L	653	0.021	653	0.0053

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

[4] The sum of individual phthalate compounds.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
h. Acenaphthene	83329	☐	☐								
i. Acenaphthylene	208968	☐	☐								
j. Anthracene	120127	☐	☐								
k. Benzo(ghi) Perylene	191242	☐	☐								
l. Fluoranthene	206440	☐	☐								
m. Fluorene	86737	☐	☐								
n. Naphthalene	91203	☐	☐								
o. Phenanthrene	85018	☐	☐								
p. Pyrene	129000	☐	☐								
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐								
38. Chloride	16887006	☒	☐								
39. Antimony	7440360	☒	☐								
40. Arsenic	7440382	☒	☐								
41. Cadmium	7440439	☒	☐								
42. Chromium III (trivalent)	16065831	☒	☐								
43. Chromium VI (hexavalent)	18540299	☒	☐								
44. Copper	7440508	☐	☒	1	grab	6020A	8 ug/L	12.5	0.0041	12.5	0.0010
45. Lead	7439921	☒	☐								
46. Mercury	7439976	☒	☐								
47. Nickel	7440020	☐	☒	1	grab	6020A	8 ug/L	20.6	0.0067	20.6	0.0019
48. Selenium	7782492	☒	☐								
49. Silver	7440224	☒	☐								
50. Zinc	7440666	☒	☐								
51. Iron	7439896	☐	☒	1	grab	E200.7	100 ug/L	173	0.057	173	0.014
Other (describe):		☒	☐								

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
		☐	☐								
		☐	☐								

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

Step 1: Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y ◉ N ○	If yes, which metals? Iron
Step 2: For any metals which exceed the **Appendix III** limits, calculate the **dilution factor (DF)** using the formula in Part I.A.3.c (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metal: Iron DF: 177 Metal: DF: Metal: DF: Metal: DF: Etc.	Look up the limit calculated at the corresponding dilution factor in **Appendix IV.** Do any of the metals in the **influent** have the potential to exceed the corresponding **effluent** limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y ○ N ◉ If Y, list which metals:

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

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

The treatment system currently consists of two recovery wells, an equalization tank, an air stripper, and a vapor phase adsorption system with steam regeneration for treating solvent-laden air. Following treatment, the groundwater is discharged to a stormwater catch basin at the site, which subsequently discharges to the Charles River.

b) Identify each applicable treatment unit (check all that apply):	Frac. tank ☐	Air stripper ☒	Oil/water separator ☐	Equalization tanks ☒	Bag filter ☒	GAC filter ☒
	Chlorination ☐	De-chlorination ☐	Other (please describe):			

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 15 gpm Maximum flow rate of treatment system 60 gpm
Design flow rate of treatment system 15 gpm

d) A description of chemical additives being used or planned to be used (attach MSDS sheets):

Vapor Activated Carbon

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

a) Identify the discharge pathway:	Direct to receiving water ☐	Within facility (sewer) ☐	Storm drain ☒	Wetlands ☐	Other (describe):

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

Groundwater is discharged into a stormdrain which empties into storm drain 24D105. Water line ultimately flows into Charles River and discharged at outfall 25E037

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

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

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 23.6 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)? Priority Organics, Metals, Nutrients, DO, Oil and Grease, Taste, Odor, Color, Noxious Aquatic Plants, Turbidity and Pathogens

6. ESA and NHPA Eligibility.

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

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

A ◉ B ○ C ○ D ○ E ○ F ○

b) If you selected Criterion D or F, has consultation with the federal services been completed? Y ○ N ○ Underway ○

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

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

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

1 ◉ 2 ○ 3 ○

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

7. Supplemental information.

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

Figure 1 - Site Location Map
Figure 2 - Drainage Area Map
Figure 3 - MC System Design
Figure 4 - Water Supply Protection Area
Exhibit 1 - Laboratory Analytical Report
Exhibit 2 - Dilution Factor Calculations
Exhibit 3 - MSDS Sheets
Exhibit 4 - Fish and Wildlife Services Species of Concern

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:	Former Bull HN Information Systems
Operator signature:	
Printed Name &Title:	James K. Redmond/Assistant Chief Operater
Date:	11/23/2010

B. Submission of NOI to EPA - All operators applying for coverage under this General Permit must submit a completed Notice of Intent (NOI) to EPA. Signed and completed NOI forms and attachments must be submitted to EPA-NE at:

U.S. Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code OEP06-4
Boston, MA 02109-3912
ATTN: Remediation General Permit NOI Processing

or electronically mailed to NPDES.Generalpermits@epa.gov

or faxed to the EPA Office at 617-918-0505

If filling out the suggested NOI form electronically on EPA's website, the signature page must be signed and faxed or mailed to EPA at the fax number and/or address listed above.

1. Filing with the states - A copy of any NOI form filed with EPA-NE must also be filed with state agencies. The state agency may elect to develop a state specific form or other information requirements.

a) Discharges in Massachusetts - In addition to the NOI, permit applicants must submit copies of the State Application Form BRPWM 12, Request for General Permit coverage for the RGP. The application form and the Transmittal Form for Permit Application and Payment may be obtained from the Massachusetts Department of Environmental Protection (MassDEP) website at www.state.ma.us/dep. Municipalities are fee-exempt, but should send a copy of the transmittal form to that address for project tracking purposes. All applicants should keep a copy of the transmittal form and a copy of the application package for their records.

1) A copy of the NOI, the transmittal form, a copy of the check, and Form BRPWM 12 should be sent to:

Massachusetts Department of Environmental Protection
Division of Watershed Management
627 Main Street, 2nd floor
Worcester, MA 01608

2) A copy of the transmittal form and the appropriate fee should be sent to:

Massachusetts Department of Environmental Protection
P.O. Box 4062
Boston, MA 02111

Please note: Applicants for discharges in Massachusetts should note that under 310 CMR 40.000, *as a matter of state law*, the general permit only applies to discharges that are **not** subject to the

Massachusetts Contingency Plan (MCP) and 310 CMR 40.000. Therefore, discharges subject to the MCP are **not** required to fill out and submit the State Application Form BRPWM 12 or pay the state fees. However, they must submit a NOI to EPA.

b) Discharges in New Hampshire - applicants must provide a copy of the Notice of Intent to:

New Hampshire Department of Environmental Services
Water Division
Wastewater Engineering Bureau
P.O. Box 95
Concord, New Hampshire 03302-0095.

2. Filing with Municipalities - A copy of the NOI must be submitted to the municipality in which the proposed discharge would be located.

Figures

Source:
Google Earth
Date Created: November 21, 2007

Figure 1
Site Location
Former Bull HN Information Systems Facility


VICINITY MAP
Charles River
Outfall Location
25E037
25D040
24D150
24D032
26F038
26G001
24G035
Stormdrain Line
Location of
Treatment Plant
LEGEND
SEWER SYSTEM FEATURES
CATCH BASIN
OUTFALL
SEWER SYSTEM MANHOLES
COMBINED
COMBINED SEWER OVERFLOW
SANITARY
STORM
UNKNOWN
SEWER PIPES
SANITARY
STORM
COMBINED
COMBINED SEWER OVERFLOW
CATCHBASIN PIPE
TRANSPORTATION FEATURES
CURBLINE
BRIDGE
RAILROAD
SIDEWALK/WALKWAY
TUNNEL
BASEMAP FEATURES
HYDROGRAPHY
DRAINAGE AREA
PARKING AREA
BUILDING
N
0 160 320 480
FEET

FIGURE 2
Boston Utility Drainage Area Map
Former Bull HN Information Systems Facility
Reference: BWSC GIS (April 2009)

CH2MHILL

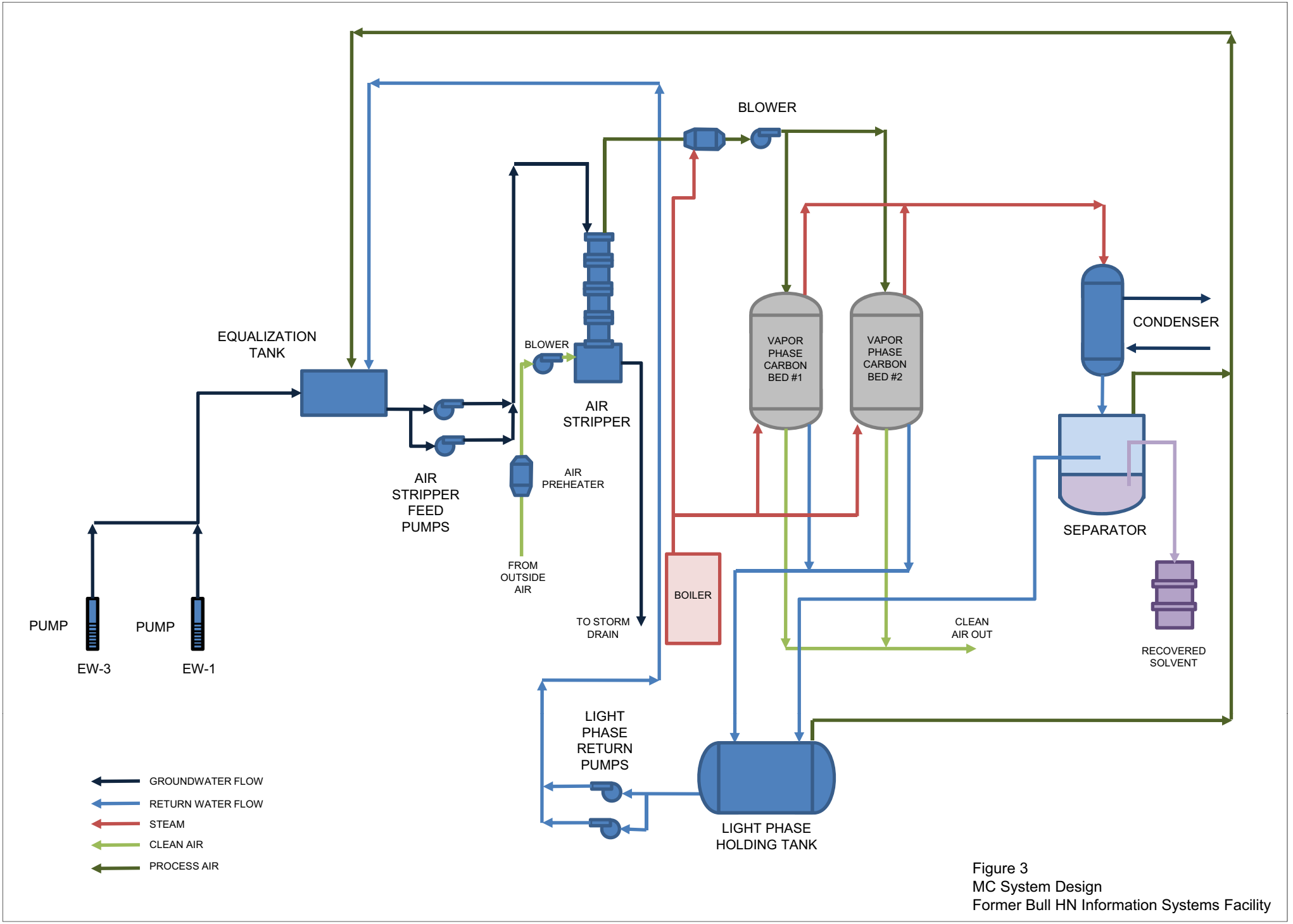

Figure 3
MC System Design
Former Bull HN Information Systems Facility

Water Supply Protection Areas Map

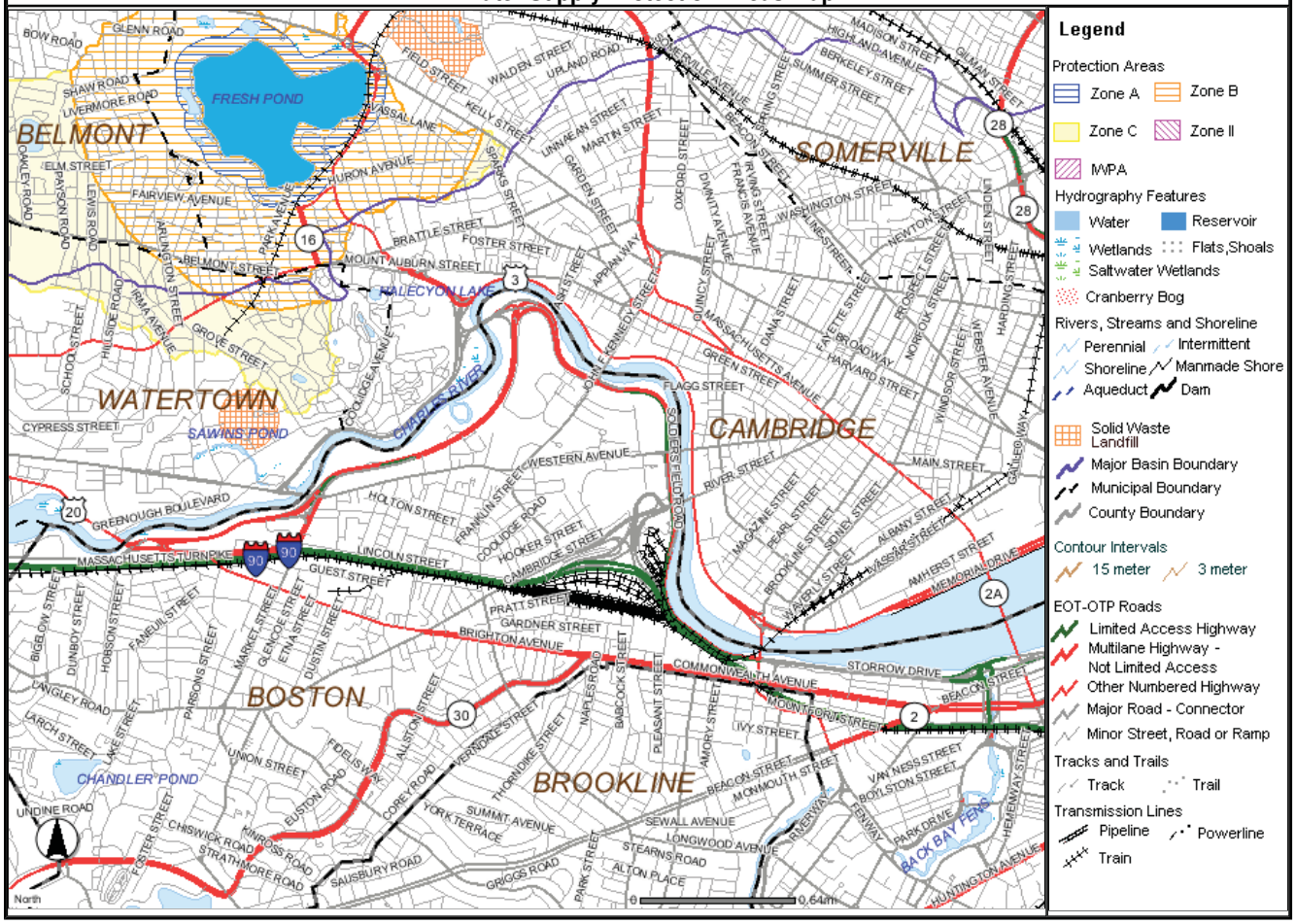

FIGURE 4
Water Supply Protection Area
Former Bull HN Information Systems Facility
Reference: MassGIS (October 2010)

CH2MHILL

Exhibit 1 – Laboratory Analytical Report

New England ACCUTEST LABORATORIES

10/07/10

Technical Report for

Honeywell International Inc.

CHMHLMAB:Brighton MA

Accutest Job Number: M94572

Sampling Date: 09/28/10

Report to:

ltseng@ch2m.com
aklopper@ch2m.com
Kyle.Block@ch2m.com

ATTN: Distribution6

Total number of pages in report: **84**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Reza Tand
Lab Director

Client Service contact: Steve Grant 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (002) ND (R-188) CO MN (11546AA) NC (653) IL (002337) DoD/ISO/IEC 17025:2005 (L2235)

Test results relate only to samples analyzed.

Sections: 1 2 3 4 5 6 7 8 9 10 11 12

Table of Contents

Table of Contents

Sample Summary

Honeywell International Inc.

CHMHLMAB:Brighton MA

Job No: M94572

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
M94572-1	09/28/10	09:31		09/28/10	AQ	Ground Water	INF-092810-FD
M94572-2	09/28/10	00:00		09/28/10	AQ	Trip Blank Water	TB-092810
M94572-3	09/28/10	08:05		09/28/10	AQ	Ground Water	INF-0992810-MC
M94572-3A	09/28/10	08:05		09/28/10	AQ	Ground Water	INF-0992810-MC

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	Honeywell International Inc.	**Job No**	M94572
Site:	CHMHLMAB:Brighton MA	**Report Date**	10/7/2010 12:53:33 PM

2 Sample(s), 1 Trip Blank(s) were collected on 09/28/2010 and were received at Accutest on 09/28/2010 properly preserved, at 1 Deg. C and intact. These Samples received an Accutest job number of M94572. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method EPA 624

Matrix AQ **Batch ID:** MSG4055

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M94544-1MS, M94544-1MSD were used as the QC samples indicated.
- MS/MSD Recovery(s) for cis-1,2-Dichloroethene, Tertiary Butyl Alcohol are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Only selected compounds requested.

Matrix AQ **Batch ID:** MSG4056

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M94572-3MS, M94572-3MSD were used as the QC samples indicated.
- MS/MSD Recovery(s) for 1,1,1-Trichloroethane are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- Only selected compounds requested.

Extractables by GCMS By Method SW846 8270C

Matrix AQ **Batch ID:** OP22833

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Only selected compounds requested.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix AQ **Batch ID:** OP22834

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Initial calibration verification standard MSI2346-ICV2346 for Phenol-d5 exceeds 30% Difference
- Continuing calibration check standard MSI2362-CC2346 for 2,4,6-Tribromophenol exceed 20% Difference. This check standard met MCP criteria.
- Only selected compounds requested.

Volatiles by GC By Method EPA 504

Matrix AQ **Batch ID:** OP22823

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M94535-13MS, M94535-13MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- OP22823-BS/BSD/MS/MSD for 1,2-Dibromoethane: Samples are non-detect for analyte.
- M94572-1 for Bromofluorobenzene (S): Outside control limits due to possible matrix interference.

Extractables by GC By Method EPA 608

Matrix AQ **Batch ID:** OP22841

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M94706-2MS, M94706-2MSD were used as the QC samples indicated.

Metals By Method EPA 200.7

Matrix AQ **Batch ID:** MP15995

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M94593-1DUP, M94593-1MS, M94593-1SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Chromium, Iron are outside control limits for sample MP15995-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Only selected metals requested.

Metals By Method EPA 245.1

Matrix AQ **Batch ID:** MP15985

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M94514-1MS, M94514-1DUP were used as the QC samples for metals.
- RPD(s) for Duplicate for Mercury are outside control limits for sample MP15985-D1. RPD acceptable due to low duplicate and sample concentrations.

Metals By Method SW846 6020A

Matrix AQ **Batch ID:** N:MP54994

- Analysis performed at Accutest Laboratories, Dayton, NJ.

Wet Chemistry By Method 6010/7196A M/200.7

Matrix AQ **Batch ID:** R27409

- M94572-1 for Chromium, Trivalent: Calculated as: (Chromium) - (Chromium, Hexavalent)

Wet Chemistry By Method EPA 1664

Matrix	AQ	Batch ID:	GP12095

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M94612-1DUP, M94612-1MS were used as the QC samples for HEM Petroleum Hydrocarbons.

Wet Chemistry By Method EPA 420.1

Matrix	AQ	Batch ID:	GP12085

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M94572-1DUP, M94572-1MS were used as the QC samples for Phenols.

Wet Chemistry By Method SM21 2540D

Matrix	AQ	Batch ID:	GN32951

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M94512-1DUP were used as the QC samples for Solids, Total Suspended.

Wet Chemistry By Method SM21 4500CL C

Matrix	AQ	Batch ID:	GN32993

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M94572-1DUP, M94572-1MS were used as the QC samples for Chloride.

Wet Chemistry By Method SM21 4500CL F

Matrix	AQ	Batch ID:	GN32940

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M94572-1DUP, M94572-1MS were used as the QC samples for Total Residual Chlorine.

Wet Chemistry By Method SW846 7196A

Matrix	AQ	Batch ID:	GN32939

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M94574-1DUP, M94574-1MS were used as the QC samples for Chromium, Hexavalent.

Accutest may not have met all requested limits due to methodology limitations, sample matrix, dilutions, or percents solids.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M94572).

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Accutest Labs of New England, Inc.	**Job No**	M94572
Site:	HWIMAB: CHMHLMAB:Brighton MA	**Report Date**	10/5/2010 11:21:09 AM

On 09/28/2010, 1 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 3.4 C. Samples were intact and properly preserved, unless noted below. An Accutest Job Number of M94572 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Metals By Method SW846 6020A

Matrix: AQ **Batch ID:** MP54994

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M94520-2SDL, M94520-2MS, M94520-2MSD, M94520-2SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Antimony, Nickel, Zinc are outside control limits for sample MP54994-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

New England ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	INF-092810-FD		
Lab Sample ID:	M94572-1	**Date Sampled:**	09/28/10
Matrix:	AQ - Ground Water	**Date Received:**	09/28/10
Method:	EPA 624	**Percent Solids:**	n/a
Project:	CHMHLMAB:Brighton MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G100480.D	1	10/01/10	EL	n/a	n/a	MSG4055
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.7	ug/l	
71-43-2	Benzene	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.35	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.27	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.94	ug/l	
75-34-3	1,1-Dichloroethane	29.4	1.0	0.25	ug/l	
107-06-2	1,2-Dichloroethane	0.67	1.0	0.28	ug/l	J
75-35-4	1,1-Dichloroethene	4.1	1.0	0.63	ug/l	
156-59-2	cis-1,2-Dichloroethene	101	5.0	0.22	ug/l	
123-91-1	1,4-Dioxane	82.0	5.0	5.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.14	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.17	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.24	ug/l	
75-65-0	Tertiary Butyl Alcohol	ND	20	5.2	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.28	ug/l	
71-55-6	1,1,1-Trichloroethane	3.1	1.0	0.22	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.33	ug/l	
79-01-6	Trichloroethene	12.8	1.0	0.28	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.77	ug/l	
	m,p-Xylene	ND	1.0	0.39	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	116%		80-140%
2037-26-5	Toluene-D8 (SUR)	105%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	101%		70-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INF-092810-FD		
Lab Sample ID:	M94572-1	**Date Sampled:**	09/28/10
Matrix:	AQ - Ground Water	**Date Received:**	09/28/10
Method:	EPA 504 EPA 504	**Percent Solids:**	n/a
Project:	CHMHLMAB:Brighton MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB32960.D	1	10/03/10	SL	10/02/10	OP22823	GBB2159
Run #2							

	Initial Volume	Final Volume
Run #1	37.5 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.014	0.013	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	220% [a]		59-170%
460-00-4	Bromofluorobenzene (S)	201% [a]		59-170%

(a) Outside control limits due to possible matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INF-092810-FD		
Lab Sample ID:	M94572-1	**Date Sampled:**	09/28/10
Matrix:	AQ - Ground Water	**Date Received:**	09/28/10
Method:	EPA 608 EPA 608	**Percent Solids:**	n/a
Project:	CHMHLMAB:Brighton MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ60909.D	1	10/06/10	CZ	10/04/10	OP22841	GYZ2595
Run #2							

	Initial Volume	Final Volume
Run #1	970 ml	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.52	0.030	ug/l	
11104-28-2	Aroclor 1221	ND	0.52	0.062	ug/l	
11141-16-5	Aroclor 1232	ND	0.52	0.078	ug/l	
53469-21-9	Aroclor 1242	ND	0.52	0.037	ug/l	
12672-29-6	Aroclor 1248	ND	0.52	0.060	ug/l	
11097-69-1	Aroclor 1254	ND	0.52	0.069	ug/l	
11096-82-5	Aroclor 1260	ND	0.52	0.024	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	99%		31-154%
877-09-8	Tetrachloro-m-xylene	102%		31-154%
2051-24-3	Decachlorobiphenyl	102%		10-148%
2051-24-3	Decachlorobiphenyl	101%		10-148%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: INF-092810-FD
Lab Sample ID: M94572-1
Matrix: AQ - Ground Water
Project: CHMHLMAB:Brighton MA

Date Sampled: 09/28/10
Date Received: 09/28/10
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony [a]	0.97 B	1.0	0.16	ug/l	2	10/02/10	10/04/10	ANJ	SW846 6020A [3]	SW846 3010A [6]
Arsenic [a]	0.82 B	2.0	0.36	ug/l	2	10/02/10	10/04/10	ANJ	SW846 6020A [3]	SW846 3010A [6]
Cadmium [a]	0.13 U	1.0	0.13	ug/l	2	10/02/10	10/04/10	ANJ	SW846 6020A [3]	SW846 3010A [6]
Chromium	2.1 B	10	0.53	ug/l	1	10/01/10	10/05/10	DA	EPA 200.7 [2]	EPA 200.7 [5]
Copper [a]	8.7	8.0	0.46	ug/l	2	10/02/10	10/04/10	ANJ	SW846 6020A [3]	SW846 3010A [6]
Iron	82.3 B	100	5.2	ug/l	1	10/01/10	10/05/10	DA	EPA 200.7 [2]	EPA 200.7 [5]
Lead [a]	0.18 B	1.0	0.050	ug/l	2	10/02/10	10/04/10	ANJ	SW846 6020A [3]	SW846 3010A [6]
Mercury	0.047 U	0.20	0.047	ug/l	1	09/29/10	09/29/10	MA	EPA 245.1 [1]	EPA 245.1 [4]
Nickel [a]	16.7	8.0	0.23	ug/l	2	10/02/10	10/04/10	ANJ	SW846 6020A [3]	SW846 3010A [6]
Selenium [a]	1.0 B	2.5	0.28	ug/l	5	10/02/10	10/04/10	ANJ	SW846 6020A [3]	SW846 3010A [6]
Silver [a]	0.099 U	4.0	0.099	ug/l	2	10/02/10	10/04/10	ANJ	SW846 6020A [3]	SW846 3010A [6]
Zinc [a]	12.7	8.0	1.7	ug/l	2	10/02/10	10/04/10	ANJ	SW846 6020A [3]	SW846 3010A [6]

(1) Instrument QC Batch: MA12259
(2) Instrument QC Batch: MA12276
(3) Instrument QC Batch: N:MA25126
(4) Prep QC Batch: MP15985
(5) Prep QC Batch: MP15995
(6) Prep QC Batch: N:MP54994

(a) Analysis performed at Accutest Laboratories, Dayton, NJ.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	INF-092810-FD		
Lab Sample ID:	M94572-1	**Date Sampled:**	09/28/10
Matrix:	AQ - Ground Water	**Date Received:**	09/28/10
		Percent Solids:	n/a
Project:	CHMHLMAB:Brighton MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	905	20	mg/l	20	10/04/10	CF	SM21 4500CL C
Chromium, Hexavalent	< 0.010	0.010	mg/l	1	09/29/10 09:00	MC	SW846 7196A
Chromium, Trivalent [a]	< 0.020	0.020	mg/l	1	10/05/10 06:21	DA	6010/7196A M/200.7
HEM Petroleum Hydrocarbons	< 4.1	4.1	mg/l	1	10/05/10	BF	EPA 1664
Phenols	< 0.050	0.050	mg/l	1	10/01/10	BF	EPA 420.1
Solids, Total Suspended	< 4.0	4.0	mg/l	1	09/30/10	BF	SM21 2540D
Total Residual Chlorine	< 0.050	0.050	mg/l	1	09/29/10 10:16	MC	SM21 4500CL F

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TB-092810		
Lab Sample ID:	M94572-2	**Date Sampled:**	09/28/10
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/28/10
Method:	EPA 624	**Percent Solids:**	n/a
Project:	CHMHLMAB:Brighton MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G100481.D	1	10/01/10	EL	n/a	n/a	MSG4055
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.7	ug/l	
71-43-2	Benzene	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.35	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.27	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.94	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.25	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.63	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	0.22	ug/l	
123-91-1	1,4-Dioxane	ND	5.0	5.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.14	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.17	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.24	ug/l	
75-65-0	Tertiary Butyl Alcohol	ND	20	5.2	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.28	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.22	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.33	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.28	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.77	ug/l	
	m,p-Xylene	ND	1.0	0.39	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	121%		80-140%
2037-26-5	Toluene-D8 (SUR)	105%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	102%		70-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INF-0992810-MC		
Lab Sample ID:	M94572-3	**Date Sampled:**	09/28/10
Matrix:	AQ - Ground Water	**Date Received:**	09/28/10
Method:	EPA 624	**Percent Solids:**	n/a
Project:	CHMHLMAB:Brighton MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G100482.D	1	10/01/10	EL	n/a	n/a	MSG4055
Run #2	G100514.D	10	10/05/10	EL	n/a	n/a	MSG4056

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.7	ug/l	
71-43-2	Benzene	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.35	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.27	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.94	ug/l	
75-34-3	1,1-Dichloroethane	36.9	1.0	0.25	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethene	201	1.0	0.63	ug/l	
156-59-2	cis-1,2-Dichloroethene	32.0	5.0	0.22	ug/l	
123-91-1	1,4-Dioxane	ND	5.0	5.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.14	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.17	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.24	ug/l	
75-65-0	Tertiary Butyl Alcohol	ND	20	5.2	ug/l	
127-18-4	Tetrachloroethene	4.8	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.28	ug/l	
71-55-6	1,1,1-Trichloroethane	1460 [a]	10	2.2	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.33	ug/l	
79-01-6	Trichloroethene	653 [a]	10	2.8	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.77	ug/l	
	m,p-Xylene	ND	1.0	0.39	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	121%	125%	80-140%
2037-26-5	Toluene-D8 (SUR)	106%	106%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	102%	101%	70-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INF-0992810-MC		
Lab Sample ID:	M94572-3	**Date Sampled:**	09/28/10
Matrix:	AQ - Ground Water	**Date Received:**	09/28/10
Method:	EPA 624	**Percent Solids:**	n/a
Project:	CHMHLMAB:Brighton MA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INF-0992810-MC		
Lab Sample ID:	M94572-3	**Date Sampled:**	09/28/10
Matrix:	AQ - Ground Water	**Date Received:**	09/28/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	CHMHLMAB:Brighton MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F49778.D	1	10/06/10	PR	10/04/10	OP22833	MSF2375
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
85-68-7	Butyl benzyl phthalate	ND	5.2	0.43	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.2	0.35	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.2	0.35	ug/l	
84-66-2	Diethyl phthalate	ND	5.2	0.64	ug/l	
131-11-3	Dimethyl phthalate	ND	5.2	1.3	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	0.51	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	87%		30-130%
321-60-8	2-Fluorobiphenyl	81%		30-130%
1718-51-0	Terphenyl-d14	88%		30-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INF-0992810-MC		
Lab Sample ID:	M94572-3	**Date Sampled:**	09/28/10
Matrix:	AQ - Ground Water	**Date Received:**	09/28/10
Method:	EPA 608 EPA 608	**Percent Solids:**	n/a
Project:	CHMHLMAB:Brighton MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ60910.D	1	10/06/10	CZ	10/04/10	OP22841	GYZ2595
Run #2							

	Initial Volume	Final Volume
Run #1	970 ml	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.52	0.030	ug/l	
11104-28-2	Aroclor 1221	ND	0.52	0.062	ug/l	
11141-16-5	Aroclor 1232	ND	0.52	0.078	ug/l	
53469-21-9	Aroclor 1242	ND	0.52	0.037	ug/l	
12672-29-6	Aroclor 1248	ND	0.52	0.060	ug/l	
11097-69-1	Aroclor 1254	ND	0.52	0.069	ug/l	
11096-82-5	Aroclor 1260	ND	0.52	0.024	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	100%		31-154%
877-09-8	Tetrachloro-m-xylene	99%		31-154%
2051-24-3	Decachlorobiphenyl	97%		10-148%
2051-24-3	Decachlorobiphenyl	98%		10-148%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INF-0992810-MC		
Lab Sample ID:	M94572-3	**Date Sampled:**	09/28/10
Matrix:	AQ - Ground Water	**Date Received:**	09/28/10
		Percent Solids:	n/a
Project:	CHMHLMAB:Brighton MA		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Copper [a]	12.5	8.0	0.46	ug/l	2	10/02/10	10/04/10	ANJ	SW846 6020A [2]	SW846 3010A [4]
Iron	173	100	5.2	ug/l	1	10/01/10	10/05/10	DA	EPA 200.7 [1]	EPA 200.7 [3]
Lead [a]	0.18 B	1.0	0.050	ug/l	2	10/02/10	10/04/10	ANJ	SW846 6020A [2]	SW846 3010A [4]
Nickel [a]	20.6	8.0	0.23	ug/l	2	10/02/10	10/04/10	ANJ	SW846 6020A [2]	SW846 3010A [4]
Zinc [a]	2.6 B	8.0	1.7	ug/l	2	10/02/10	10/04/10	ANJ	SW846 6020A [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA12276
(2) Instrument QC Batch: N:MA25126
(3) Prep QC Batch: MP15995
(4) Prep QC Batch: N:MP54994

(a) Analysis performed at Accutest Laboratories, Dayton, NJ.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	INF-0992810-MC		
Lab Sample ID:	M94572-3	**Date Sampled:**	09/28/10
Matrix:	AQ - Ground Water	**Date Received:**	09/28/10
		Percent Solids:	n/a
Project:	CHMHLMAB:Brighton MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
HEM Petroleum Hydrocarbons	< 4.1	4.1	mg/l	1	10/05/10	BF	EPA 1664
Phenols	< 0.050	0.050	mg/l	1	10/01/10	BF	EPA 420.1

RL = Reporting Limit

Report of Analysis

Client Sample ID:	INF-0992810-MC		
Lab Sample ID:	M94572-3A	**Date Sampled:**	09/28/10
Matrix:	AQ - Ground Water	**Date Received:**	09/28/10
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	CHMHLMAB:Brighton MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I68287.D	1	10/06/10	AA	10/04/10	OP22834	MSI2362
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.0		ug/l	
83-32-9	Acenaphthene	ND	0.10	0.012	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.029	ug/l	
120-12-7	Anthracene	ND	0.10	0.027	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.052	0.011	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.014	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.052	0.010	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.015	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.012	ug/l	
218-01-9	Chrysene	ND	0.10	0.013	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.016	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.017	ug/l	
86-73-7	Fluorene	ND	0.10	0.046	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.013	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.21	0.013	ug/l	
91-20-3	Naphthalene	ND	0.10	0.011	ug/l	
85-01-8	Phenanthrene	ND	0.052	0.013	ug/l	
129-00-0	Pyrene	ND	0.10	0.021	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	37%		15-110%
4165-62-2	Phenol-d5	20%		15-110%
118-79-6	2,4,6-Tribromophenol	67%		15-110%
4165-60-0	Nitrobenzene-d5	64%		30-130%
321-60-8	2-Fluorobiphenyl	62%		30-130%
1718-51-0	Terphenyl-d14	63%		30-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

New England ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody
- MCP Form
- Sample Tracking Chronicle

Parameter Certification Exceptions

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
tert-Amyl Methyl Ether	994-05-8	**EPA 624**	AQ	Certified by SOP MMS134/GC-MS
cis-1,2-Dichloroethene	156-59-2	**EPA 624**	AQ	Certified by SOP MMS134/GC-MS
Methyl Tert Butyl Ether	1634-04-4	**EPA 624**	AQ	Certified by SOP MMS134/GC-MS
Tertiary Butyl Alcohol	75-65-0	**EPA 624**	AQ	Certified by SOP MMS134/GC-MS

Parameter Certifications

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

The following parameters included in this report are certified by the state of MA.

Parameter	CAS#	Method	Mat	Certification Status
Benzene	71-43-2	**EPA 624**	AQ	Accutest is certified for this parameter.
Carbon tetrachloride	56-23-5	**EPA 624**	AQ	Accutest is certified for this parameter.
1,1-Dichloroethane	75-34-3	**EPA 624**	AQ	Accutest is certified for this parameter.
1,2-Dichlorobenzene	95-50-1	**EPA 624**	AQ	Accutest is certified for this parameter.
1,2-Dichloroethane	107-06-2	**EPA 624**	AQ	Accutest is certified for this parameter.
1,3-Dichlorobenzene	541-73-1	**EPA 624**	AQ	Accutest is certified for this parameter.
1,4-Dichlorobenzene	106-46-7	**EPA 624**	AQ	Accutest is certified for this parameter.
Ethylbenzene	100-41-4	**EPA 624**	AQ	Accutest is certified for this parameter.
Methylene chloride	75-09-2	**EPA 624**	AQ	Accutest is certified for this parameter.
1,1,1-Trichloroethane	71-55-6	**EPA 624**	AQ	Accutest is certified for this parameter.
1,1,2-Trichloroethane	79-00-5	**EPA 624**	AQ	Accutest is certified for this parameter.
Tetrachloroethene	127-18-4	**EPA 624**	AQ	Accutest is certified for this parameter.
Toluene	108-88-3	**EPA 624**	AQ	Accutest is certified for this parameter.
Trichloroethene	79-01-6	**EPA 624**	AQ	Accutest is certified for this parameter.
Vinyl chloride	75-01-4	**EPA 624**	AQ	Accutest is certified for this parameter.
1,2-Dibromoethane	106-93-4	**EPA 504**	AQ	Accutest is certified for this parameter.
Aroclor 1016	12674-11-2	**EPA 608**	AQ	Accutest is certified for this parameter.
Aroclor 1221	11104-28-2	**EPA 608**	AQ	Accutest is certified for this parameter.
Aroclor 1232	11141-16-5	**EPA 608**	AQ	Accutest is certified for this parameter.
Aroclor 1242	53469-21-9	**EPA 608**	AQ	Accutest is certified for this parameter.
Aroclor 1248	12672-29-6	**EPA 608**	AQ	Accutest is certified for this parameter.
Aroclor 1254	11097-69-1	**EPA 608**	AQ	Accutest is certified for this parameter.
Aroclor 1260	11096-82-5	**EPA 608**	AQ	Accutest is certified for this parameter.
Chromium	7440-47-3	**EPA 200.7**	AQ	Accutest is certified for this parameter.
Iron	7439-89-6	**EPA 200.7**	AQ	Accutest is certified for this parameter.
Mercury	7439-97-6	**EPA 245.1**	AQ	Accutest is certified for this parameter.
Chloride	16887-00-6	**SM21 4500CL C**	AQ	Accutest is certified for this parameter.
Phenols		**EPA 420.1**	AQ	Accutest is certified for this parameter.
Solids, Total Suspended		**SM21 2540D**	AQ	Accutest is certified for this parameter.
Total Residual Chlorine		**SM21 4500CL F**	AQ	Accutest is certified for this parameter.

Pg 1 of 2

M94572

Accutest New England 495 Technology Center West, Building One, Marlborough, MA 01752 (508) 481-6200	
Sampling Co.:	CH2MHILL
Client Contact: (name, co., address)	
Kevin McGarvey: Kevin.Mcgarvey@ch2m.com	
25 New Chardon Street, Suite 300	
Boston, MA 02114	
Preliminary Data To	
Sample Receipt Acknowledgement To	
Hard Copy To	Kyle Block (CD) ; Amy Klopper/Critigen
Invoice To:	CH2M HILL

Honeywell Chain Of Custody / Analysis Request

Privileged & Confidential	
EDD To:	Sarah Mader/Critigen (Sarah.Mader@critigen.com)
Sampler:	Tim Bakey
PO #	
Analysis Turnaround Time (TAT):	7
Consultant	CH2M
Full Report TAT:	
Site Name:	HW - Brighton, MA
Location of Site:	Brighton, MA
Phase:	
Sampling Program	

AESI Ref:	40449.32079
COC#	37558_092810
Lab Proj # (SDG):	
Lab ID	
Site ID	hwbright
Lab Job #	
Authorized User:	Honeywell
Text & Excel File Drive	Excel & Text File Order

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Sample Identification

#	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	SW8021 by SW8260 - Chlorinated List	E624 VOC (see note 2)	E504.1 EDB	Free Cn by SM4500-CN-I	E608 PCB	E335.2 Total Cn	SW6020 Metals (see note 1) and Hg by 245.2	TRC SM4500-CLD and Chromium (VI) by SM3500-CRD	TSS SM2540D.	Phenolics, Total E420.1	TPH E1664A.	SW8270M Low SVOC-PAH Total Group 1, Group 2 (see note 3)	Chloride	Sampling Method (code)	Lab Sample Numbers
Preservative													2	2	X	5	3	11	3	1	1	4	2	1	1		
											Units				SP									TB			
1	INF-FD	← 1		INF-092810-FD	9/28/10	9:31	GW	Water	REG	12	grab	N		X	X		X		X	X	X	X	X	X	X		
2					TB																						
3		2		TB-092810						4				X	X												
4																											
6																											
7																											
8																											
9																											
10																											
11																											
12																										10D, 6B, 4B, 4K2	

Relinquished by	Company		Received by	Company		Condition		Custody Seals Intact	ICD
Timothy Bakey [signature]	Date/Time 9/28/10 1430	CH2M HILL	[signature]	Date/Time		Cooler Temp.			
Relinquished by	Company		Received by	Company		Condition		Custody Seals Intact	
[signature]	Date/Time 9/28/10 1630		[signature]	Date/Time		Cooler Temp.			

Preservatives: (Other; Specify):

0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions) See Third

1.0°C

Note: 1. SW6020 Metals (1) = Antimony, Arsenic, Cadmium, Chromium (III and Total), Copper, Lead, Nickel Selenium, Silver, Zinc and Iron by 200.7

2. E624 (2) = Acetone, 1,4-Dioxane, Benzene, Toluene, Ethylbenzene, m/p-Xylene, Total BTEX, MTBE, Tert-amyl Methyl Ether (TAME), Tert-butyl alcohol (TBA), carbon tetrachloride, total dicholorobenzene (DCB), 1,2-DCB, 1,3-DCB, 1,4-DCB, 1,1-DCA, 1,2-DCA, 1,1-DCE, cis-1,2-DCE, methylene chloride, PCE, 1,1,1-TCA, 1,1,2-TCA, TCE, vinyl chloride

3. SVCOs (3) = MC-INF Sample: Only Report Pentachlorophenol, Bis(2-ethylhexyl)phthalate, and Total Phthalates.
FD-INF Sample: Pentachlorophenol, Bis(2-ethylhexyl)phthalate, Total Phthalates, Total Group I PAHs and Total Group II PAHs
Total Group I Polycyclic Aromatic Hydrocarbons (PAHs): benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthrancene, indeno(1,2,3-cd)pyrene.
Total Group II PAHs: acenaphthene, acenaphthylene, antrhacene, benzo(ghiperylene, fluoranthene, fluorene, naphthalene, phenanthrene, pyrene,

* Total, Free cyanide ; VOCs 8260, & PAHs sampled on 9/16/10

4.3

4

M94572: Chain of Custody

Page 1 of 2

M94572

Accutest New England
495 Technology Center West, Building One, Marlborough, MA 01752
(508) 481-6200

Honeywell — **Chain Of Custody / Analysis Request**

AESI Ref: 40449.32168
COC#: 37558_92810

Privileged & Confidential

Site Name: HW - Brighton, MA
Location of Site: Brighton, MA
Phase:
Sampling Program
Lab Proj # (SDG):
Lab ID
Site ID: hwbright
Lab Job #:
Authorized User: Honeywell
Text & Excel File Drive: Excel & Text File Order

Sampling Co.: CH2MHILL
EDD To: Sarah Mader/Critigen (Sarah.Mader@critigen.com)
Client Contact: (name, co., address)
Kevin McGarvey; Kevin.Mcgarvey@ch2m.com
25 New Chardon Street, Suite 300
Boston, MA 02114
Preliminary Data To
Sample Receipt Acknowledgement To
Hard Copy To: Kyle Block (CD) ; Amy Klopper/Critigen
Invoice To: CH2M HILL
Sampler: Tim Bakey
PO #
Analysis Turnaround Time (TAT): 7
Consultant: CH2M
Full Report TAT:

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	Sample Identification				Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	SW8021 by SW8260 - Chlorinated List	E624 VOC (see note 2)	E504.1 EDB	SW6020 Copper, Lead, Nickel, and Zinc and Iron by 200.7	E608 PCB	E335.2 Total Cyanide	SW6020 Metals (see note 1)	E245.2 Hg, SM3500-CRD and Chromium (VI) by SM3500-CRD	TRC SM4500-CLD	TSS SM2540D	Phenolics, Total E420.1	TPH E1664A	SW8270/M Low SVOC, PAH Total Group 1, Group 2 (see note 3)	Sampling Method (code)	Lab Sample Numbers
	Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID							Units																	
														Preservative	2	2	3	3	3	5	3		0	0	4	2	0		
1																												
2																												
3																												
4	INF-MC	-3		INF-0992810-MC	9/28/2010	8:05	GW	Water	REG	10	grab	N	X		X	X							X	X	X		
5										(10)																		
6																												
7																												
8																												
9																												
10																												
11																												
12																												

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
Timothy Bakey	CH2M HILL		Date/Time	Cooler Temp.	
Date/Time: 9/28/10 1420					
Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
			Date/Time	Cooler Temp.	
Date/Time: 9/28/10 1630					

Preservatives: (Other: Specify):
0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

Note: 1. SW6020 Metals (1) = Antimony, Arsenic, Cadmium, Chromium (III and Total), Copper, Lead, Nickel Selenium, Silver, Zinc and Iron by 200.7
2. E624 (2) = Acetone, 1,4-Dioxane, Benzene, Toluene, Ethylbenzene, m/p-Xylene, Total BTEX, MTBE, Tert-amyl Methyl Ether (TAME), Tert-butyl alcohol (TBA), carbon tetrachloride, total dicholorohenzene (DCB), 1,2-DCB, 1,3-DCB, 1,4-DCB, 1,1-DCA, 1,2-DCA, 1,1-DCE, cis-1,2-DCE, methylene chloride, PCE, 1,1,1-TCA, 1,1,2-TCA, TCE, vinyl chloride
3. SVCOs (3) = MC-INF Sample: Only Report Pentachlorophenol, Bis(2-ethylhexyl)phthalate, and Total Phthalates.
FD-INF Sample: Pentachlorophenol, Bis(2-ethylhexyl)phthalate, Total Phthalates, Total Group I PAHs and Total Group II PAHs
Total Group I Polycyclic Aromatic Hydrocarbons (PAHs): benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene.
Total Group II PAHs: acenaphthene, acenaphthylene, anthracene, benzo(ghiperylene, fluoranthene, fluorene, naphthalene, phenanthrene, pyrene,

VOCs 8260 sampled on 9/16/10
TB

M94572: Chain of Custody
Page 2 of 2

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

MassDEP Analytical Protocol Certification Form

Laboratory Name:	Accutest Laboratories of New England	Project #:	M94572
Project Location:	CHMHLMAB:Brighton MA	MADEP RTN	None

This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s)
M94572-1,M94572-2,M94572-3,M94572-3A

Test method: Refer to case narrative.

Matrices: Groundwater/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other ( )

CAM Protocol (check all that apply below):

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

Affirmative Responses to Questions A Through F are required for "Presumptive Certainty status

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

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

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols	☐ Yes	☑ No [1]
	Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data useability and representativeness requirements described in 310 CMR 40.1056(2)(k) and WSC-07-350.		
H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes	☑ No [1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes	☑ No [1]

[1] ***All Negative responses must be addressed in an attached Environmental Laboratory case narrative.***

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

Signature: [signature] **Position:** **Laboratory Director**

Printed Name: **Reza Tand** **Date:** **10/07/2010**

Internal Sample Tracking Chronicle

Honeywell International Inc.

CHMHLMAB:Brighton MA

Job No: M94572

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M94572-1	Collected: 28-SEP-10 09:31 By: INF-092810-FD		Received: 28-SEP-10	By: JB		
M94572-1	SW846 7196A	29-SEP-10 09:00	MC			XCR
M94572-1	SM21 4500CL F	29-SEP-10 10:16	MC			TRC
M94572-1	EPA 245.1	29-SEP-10 17:08	MA	29-SEP-10	MA	HG
M94572-1	SM21 2540D	30-SEP-10	BF			TSS
M94572-1	EPA 420.1	01-OCT-10	BF	01-OCT-10	BF	PN
M94572-1	EPA 624	01-OCT-10 17:04	EL			V624SL
M94572-1	EPA 504	03-OCT-10 11:00	SL	02-OCT-10	FC	V504EDB
M94572-1	SM21 4500CL C	04-OCT-10	CF			CHL
M94572-1	SW846 6020A	04-OCT-10 23:34	ANJ	02-OCT-10		AGMS,ASMS,CDMS,CUMS,NIMS, PBMS,SBMS,ZNMS
M94572-1	SW846 6020A	04-OCT-10 23:38	ANJ	02-OCT-10		SEMS
M94572-1	EPA 1664	05-OCT-10	BF	05-OCT-10	BF	PHC1664
M94572-1	EPA 200.7	05-OCT-10 06:21	DA	01-OCT-10	EM	CR,FE
M94572-1	6010/7196A M/200.7	05-OCT-10 06:21	DA			CR3
M94572-1	EPA 608	06-OCT-10 15:58	CZ	04-OCT-10	RJ	P608PCB
M94572-2	Collected: 28-SEP-10 00:00 By: TB-092810		Received: 28-SEP-10	By: JB		
M94572-2	EPA 624	01-OCT-10 17:32	EL			V624SL
M94572-3	Collected: 28-SEP-10 08:05 By: INF-0992810-MC		Received: 28-SEP-10	By: JB		
M94572-3	EPA 420.1	01-OCT-10	BF	01-OCT-10	BF	PN
M94572-3	EPA 624	01-OCT-10 18:01	EL			V624SL
M94572-3	SW846 6020A	04-OCT-10 23:42	ANJ	02-OCT-10		CUMS,NIMS,PBMS,ZNMS
M94572-3	EPA 1664	05-OCT-10	BF	05-OCT-10	BF	PHC1664
M94572-3	EPA 624	05-OCT-10 01:23	EL			V624SL
M94572-3	EPA 200.7	05-OCT-10 06:26	DA	01-OCT-10	EM	FE
M94572-3	EPA 608	06-OCT-10 16:13	CZ	04-OCT-10	RJ	P608PCB
M94572-3	SW846 8270C	06-OCT-10 16:34	PR	04-OCT-10	MS	AB8270SL
M94572-3A	Collected: 28-SEP-10 08:05 By: INF-0992810-MC		Received: 28-SEP-10	By: JB		
M94572-3A	SW846 8270C BY SIM	06-OCT-10 16:21	AA	04-OCT-10	CA	AB8270SIMSL

New England ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG4055-MB	G100468.D	1	10/01/10	EL	n/a	n/a	MSG4055

The QC reported here applies to the following samples: **Method:** EPA 624

M94572-1, M94572-2, M94572-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.7	ug/l	
71-43-2	Benzene	ND	0.50	0.13	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.35	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.27	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.94	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.25	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.63	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	0.22	ug/l	
123-91-1	1,4-Dioxane	ND	5.0	5.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.14	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.17	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.24	ug/l	
75-65-0	Tertiary Butyl Alcohol	ND	20	5.2	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.28	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.22	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.33	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.28	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.77	ug/l	
	m,p-Xylene	ND	1.0	0.39	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries		Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	106%	80-140%
2037-26-5	Toluene-D8 (SUR)	100%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	99%	70-120%

Method Blank Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG4056-MB	G100498.D	1	10/04/10	EL	n/a	n/a	MSG4056

The QC reported here applies to the following samples: **Method:** EPA 624

M94572-3

CAS No.	Compound	Result	RL	MDL	Units	Q
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.22	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.28	ug/l	

CAS No.	Surrogate Recoveries		Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	102%	80-140%
2037-26-5	Toluene-D8 (SUR)	98%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	95%	70-120%

Blank Spike Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG4055-BS	G100467.D	1	10/01/10	EL	n/a	n/a	MSG4055

The QC reported here applies to the following samples: **Method:** EPA 624

M94572-1, M94572-2, M94572-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	20	15.3	77	30-150
71-43-2	Benzene	20	19.2	96	37-151
56-23-5	Carbon tetrachloride	20	18.7	94	70-140
95-50-1	1,2-Dichlorobenzene	20	18.9	95	18-190
541-73-1	1,3-Dichlorobenzene	20	18.9	95	59-156
106-46-7	1,4-Dichlorobenzene	20	19.5	98	18-190
75-34-3	1,1-Dichloroethane	20	20.0	100	59-155
107-06-2	1,2-Dichloroethane	20	17.7	89	49-155
75-35-4	1,1-Dichloroethene	20	19.8	99	1-234
156-59-2	cis-1,2-Dichloroethene	20	19.7	99	61-128
123-91-1	1,4-Dioxane	100	90.9	91	50-150 [a]
100-41-4	Ethylbenzene	20	19.6	98	37-162
1634-04-4	Methyl Tert Butyl Ether	20	20.7	104	58-141
75-09-2	Methylene chloride	20	19.1	96	1-221
994-05-8	tert-Amyl Methyl Ether	20	20.0	100	50-150 [a]
75-65-0	Tertiary Butyl Alcohol	200	211	106	68-139
127-18-4	Tetrachloroethene	20	18.3	92	64-148
108-88-3	Toluene	20	19.1	96	47-150
71-55-6	1,1,1-Trichloroethane	20	19.7	99	52-162
79-00-5	1,1,2-Trichloroethane	20	18.2	91	52-150
79-01-6	Trichloroethene	20	15.6	78	71-157
75-01-4	Vinyl chloride	20	14.4	72	1-251
	m,p-Xylene	40	39.3	98	77-138
95-47-6	o-Xylene	20	19.1	96	77-133
1330-20-7	Xylenes (total)	60	58.5	98	78-136

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	102%	80-140%
2037-26-5	Toluene-D8 (SUR)	100%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	102%	70-120%

(a) Advisory control limits.

Blank Spike Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG4056-BS	G100496.D	1	10/04/10	EL	n/a	n/a	MSG4056

The QC reported here applies to the following samples: **Method:** EPA 624

M94572-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-55-6	1,1,1-Trichloroethane	20	18.4	92	52-162
79-01-6	Trichloroethene	20	16.4	82	71-157

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	97%	80-140%
2037-26-5	Toluene-D8 (SUR)	97%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	97%	70-120%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M94544-1MS	G100483.D	5	10/01/10	EL	n/a	n/a	MSG4055
M94544-1MSD	G100484.D	5	10/01/10	EL	n/a	n/a	MSG4055
M94544-1	G100470.D	1	10/01/10	EL	n/a	n/a	MSG4055

The QC reported here applies to the following samples: **Method:** EPA 624

M94572-1, M94572-2, M94572-3

CAS No.	Compound	M94544-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		100	85.7	86	85.9	86	0	10-150/47
71-43-2	Benzene	ND		100	120	120	120	120	0	37-151/20
56-23-5	Carbon tetrachloride	ND		100	115	115	115	115	0	70-140/20
95-50-1	1,2-Dichlorobenzene	ND		100	94.4	94	96.0	96	2	18-190/21
541-73-1	1,3-Dichlorobenzene	ND		100	96.8	97	99.0	99	2	59-156/20
106-46-7	1,4-Dichlorobenzene	ND		100	101	101	103	103	2	18-190/22
75-34-3	1,1-Dichloroethane	0.61		100	149	148	145	144	3	59-155/20
107-06-2	1,2-Dichloroethane	ND		100	114	114	113	113	1	49-155/20
75-35-4	1,1-Dichloroethene	ND		100	145	145	145	145	0	1-234/26
156-59-2	cis-1,2-Dichloroethene	ND		100	145	145* [a]	145	145* [a]	0	50-141/25
123-91-1	1,4-Dioxane	ND		500	498	100	499	100	0	50-150/30 [b]
100-41-4	Ethylbenzene	ND		100	98.7	99	101	101	2	37-162/20
1634-04-4	Methyl Tert Butyl Ether	ND		100	143	143	140	140	2	20-150/46
75-09-2	Methylene chloride	ND		100	142	142	138	138	3	1-221/20
994-05-8	tert-Amyl Methyl Ether	ND		100	116	116	118	118	2	50-150/30 [b]
75-65-0	Tertiary Butyl Alcohol	ND		1000	1470	147* [a]	1460	146* [a]	1	55-144/34
127-18-4	Tetrachloroethene	0.65		100	93.9	93	97.5	97	4	64-148/20
108-88-3	Toluene	ND		100	120	120	120	120	0	47-150/20
71-55-6	1,1,1-Trichloroethane	ND		100	148	148	144	144	3	52-162/20
79-00-5	1,1,2-Trichloroethane	ND		100	114	114	113	113	1	52-150/20
79-01-6	Trichloroethene	ND		100	109	109	114	114	4	71-157/20
75-01-4	Vinyl chloride	ND		100	185	185	171	171	8	1-251/20
	m,p-Xylene	ND		200	200	100	204	102	2	38-150/36
95-47-6	o-Xylene	ND		100	97.4	97	99.6	100	2	47-150/36
1330-20-7	Xylenes (total)	ND		300	298	99	304	101	2	40-150/36

CAS No.	Surrogate Recoveries	MS	MSD	M94544-1	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	122%	118%	110%	80-140%
2037-26-5	Toluene-D8 (SUR)	106%	105%	101%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	105%	107%	102%	70-120%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) Advisory control limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M94572-3MS	G100515.D	10	10/05/10	EL	n/a	n/a	MSG4056
M94572-3MSD	G100516.D	10	10/05/10	EL	n/a	n/a	MSG4056
M94572-3	G100514.D	10	10/05/10	EL	n/a	n/a	MSG4056

The QC reported here applies to the following samples: **Method:** EPA 624

M94572-3

CAS No.	Compound	M94572-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-55-6	1,1,1-Trichloroethane	1460		200	1810	175* [a]	1870	205* [a]	3	52-162/20
79-01-6	Trichloroethene	653		200	909	128	929	138	2	71-157/20

CAS No.	Surrogate Recoveries	MS	MSD	M94572-3	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	128%	125%	125%	80-140%
2037-26-5	Toluene-D8 (SUR)	106%	106%	106%	80-120%
460-00-4	4-Bromofluorobenzene (SUR)	105%	106%	101%	70-120%

(a) Outside control limits due to high level in sample relative to spike amount.

Volatile Internal Standard Area Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Check Std:	MSG4055-ICC4055	**Injection Date:**	09/30/10
Lab File ID:	G100459.D	**Injection Time:**	22:41
Instrument ID:	GCMSG	**Method:**	EPA 624

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Check Std	22328	8.62	140103	10.01	78474	13.29
Upper Limit [a]	44656	9.12	280206	10.51	156948	13.79
Lower Limit [b]	11164	8.12	70052	9.51	39237	12.79

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
MSG4055-BS	23833	8.61	159592	10.01	93010	13.29
MSG4055-MB	21047	8.62	145009	10.01	87849	13.29
ZZZZZZ	19967	8.61	144266	10.01	89071	13.29
M94544-1	18755	8.61	136836	10.01	85403	13.29
ZZZZZZ	18603	8.61	135867	10.01	87494	13.29
ZZZZZZ	18169	8.62	132269	10.01	86766	13.29
ZZZZZZ	17655	8.62	128515	10.01	82972	13.29
ZZZZZZ	17310	8.62	128744	10.01	85295	13.29
ZZZZZZ	17229	8.62	127944	10.01	85057	13.29
ZZZZZZ	17304	8.61	128553	10.01	84397	13.29
ZZZZZZ	16533	8.62	123914	10.01	84043	13.29
ZZZZZZ	16612	8.62	122594	10.01	82951	13.29
ZZZZZZ	16795	8.61	124554	10.01	85544	13.29
M94572-1	16614	8.61	122773	10.01	84021	13.29
M94572-2	15574	8.62	119533	10.01	81844	13.29
M94572-3	15827	8.62	120394	10.01	83802	13.29
M94544-1MS	15380	8.61	121101	10.01	87296	13.29
M94544-1MSD	15799	8.62	123215	10.01	87008	13.29
ZZZZZZ	15539	8.62	120518	10.01	85376	13.29
ZZZZZZ	14974	8.62	119247	10.01	85379	13.29
ZZZZZZ	14841	8.61	119263	10.01	84765	13.29

IS 1 = Bromochloromethane
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Check Std: MSG4056-CC4055 **Injection Date:** 10/04/10
Lab File ID: G100495.D **Injection Time:** 16:26
Instrument ID: GCMSG **Method:** EPA 624

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Check Std	24015	8.61	148504	10.01	84204	13.29
Upper Limit [a]	48030	9.11	297008	10.51	168408	13.79
Lower Limit [b]	12008	8.11	74252	9.51	42102	12.79

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
MSG4056-BS	23918	8.61	148590	10.01	84694	13.29
MSG4056-MB	22259	8.62	141432	10.01	81445	13.29
ZZZZZZ	21947	8.61	139294	10.01	80561	13.29
ZZZZZZ	21482	8.61	141598	10.01	83686	13.29
ZZZZZZ	21052	8.61	138712	10.01	83588	13.28
ZZZZZZ	20196	8.61	134949	10.01	82571	13.29
ZZZZZZ	19649	8.61	134650	10.01	83548	13.29
ZZZZZZ	19544	8.61	132759	10.01	83409	13.29
ZZZZZZ	18861	8.61	130321	10.01	82569	13.29
ZZZZZZ	18189	8.62	129663	10.01	83915	13.29
ZZZZZZ	17965	8.61	125902	10.01	83667	13.29
ZZZZZZ	17115	8.61	126422	10.01	84812	13.29
ZZZZZZ	16587	8.61	124076	10.01	83245	13.29
ZZZZZZ	16281	8.61	125401	10.01	85213	13.29
ZZZZZZ	15749	8.61	122238	10.01	86441	13.29
ZZZZZZ	15622	8.61	122229	10.01	86144	13.29
ZZZZZZ	15025	8.61	120212	10.01	86484	13.29
M94572-3	14490	8.61	118578	10.01	86988	13.29
M94572-3MS	14177	8.61	120447	10.01	92172	13.29
M94572-3MSD	14229	8.61	121013	10.01	93336	13.28
ZZZZZZ	13338	8.61	117110	10.01	89959	13.29

IS 1 = Bromochloromethane
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Method: EPA 624 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
M94572-1	G100480.D	116.0	105.0	101.0
M94572-2	G100481.D	121.0	105.0	102.0
M94572-3	G100514.D	125.0	106.0	101.0
M94572-3	G100482.D	121.0	106.0	102.0
M94544-1MS	G100483.D	122.0	106.0	105.0
M94544-1MSD	G100484.D	118.0	105.0	107.0
M94572-3MS	G100515.D	128.0	106.0	105.0
M94572-3MSD	G100516.D	125.0	106.0	106.0
MSG4055-BS	G100467.D	102.0	100.0	102.0
MSG4055-MB	G100468.D	106.0	100.0	99.0
MSG4056-BS	G100496.D	97.0	97.0	97.0
MSG4056-MB	G100498.D	102.0	98.0	95.0

Surrogate Compounds	Recovery Limits
S1 = 1,2-Dichloroethane-D4 (SUR)	80-140%
S2 = Toluene-D8 (SUR)	80-120%
S3 = 4-Bromofluorobenzene (SUR)	70-120%

New England ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22833-MB	F49775.D	1	10/06/10	PR	10/04/10	OP22833	MSF2376

The QC reported here applies to the following samples: **Method:** SW846 8270C

M94572-3

CAS No.	Compound	Result	RL	MDL	Units	Q
85-68-7	Butyl benzyl phthalate	ND	5.0	0.41	ug/l	
84-74-2	Di-n-butyl phthalate	0.38	5.0	0.34	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	5.0	0.34	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	0.61	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	1.3	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.49	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	35%	15-110%
4165-62-2	Phenol-d5	22%	15-110%
118-79-6	2,4,6-Tribromophenol	78%	15-110%
4165-60-0	Nitrobenzene-d5	79%	30-130%
321-60-8	2-Fluorobiphenyl	74%	30-130%
1718-51-0	Terphenyl-d14	87%	30-130%

Method Blank Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22834-MB	I68284.D	1	10/06/10	AA	10/04/10	OP22834	MSI2362

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

M94572-3A

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	1.0		ug/l	
83-32-9	Acenaphthene	ND	0.10	0.012	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.028	ug/l	
120-12-7	Anthracene	ND	0.10	0.026	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	0.011	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.013	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	0.0096	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.015	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.011	ug/l	
218-01-9	Chrysene	ND	0.10	0.012	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.016	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.016	ug/l	
86-73-7	Fluorene	ND	0.10	0.044	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.013	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.20	0.012	ug/l	
91-20-3	Naphthalene	ND	0.10	0.011	ug/l	
85-01-8	Phenanthrene	ND	0.050	0.012	ug/l	
129-00-0	Pyrene	ND	0.10	0.020	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	42%	15-110%
4165-62-2	Phenol-d5	23%	15-110%
118-79-6	2,4,6-Tribromophenol	65%	15-110%
4165-60-0	Nitrobenzene-d5	72%	30-130%
321-60-8	2-Fluorobiphenyl	70%	30-130%
1718-51-0	Terphenyl-d14	79%	30-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22833-BS	F49776.D	1	10/06/10	PR	10/04/10	OP22833	MSF2376
OP22833-BSD	F49777.D	1	10/06/10	PR	10/04/10	OP22833	MSF2376

The QC reported here applies to the following samples: **Method:** SW846 8270C

M94572-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
85-68-7	Butyl benzyl phthalate	50	57.4	115	60.7	121	6	40-140/20
84-74-2	Di-n-butyl phthalate	50	53.1	106	56.8	114	7	40-140/20
117-84-0	Di-n-octyl phthalate	50	61.0	122	63.4	127	4	40-140/20
84-66-2	Diethyl phthalate	50	51.7	103	56.3	113	9	40-140/20
131-11-3	Dimethyl phthalate	50	48.1	96	52.8	106	9	40-140/20
117-81-7	bis(2-Ethylhexyl)phthalate	50	58.3	117	62.4	125	7	40-140/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	53%	56%	15-110%
4165-62-2	Phenol-d5	33%	36%	15-110%
118-79-6	2,4,6-Tribromophenol	90%	96%	15-110%
4165-60-0	Nitrobenzene-d5	100%	107%	30-130%
321-60-8	2-Fluorobiphenyl	93%	99%	30-130%
1718-51-0	Terphenyl-d14	102%	108%	30-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22834-BS	I68285.D	1	10/06/10	AA	10/04/10	OP22834	MSI2362
OP22834-BSD	I68286.D	1	10/06/10	AA	10/04/10	OP22834	MSI2362

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

M94572-3A

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
87-86-5	Pentachlorophenol	100	67.3	67	70.9	71	5	15-130/30
83-32-9	Acenaphthene	50	38.3	77	39.6	79	3	40-140/30
208-96-8	Acenaphthylene	50	35.9	72	37.6	75	5	40-140/30
120-12-7	Anthracene	50	39.8	80	41.7	83	5	40-140/30
56-55-3	Benzo(a)anthracene	50	42.4	85	44.7	89	5	40-140/30
50-32-8	Benzo(a)pyrene	50	34.8	70	35.6	71	2	40-140/30
205-99-2	Benzo(b)fluoranthene	50	36.7	73	37.3	75	2	40-140/30
191-24-2	Benzo(g,h,i)perylene	50	42.4	85	44.1	88	4	40-140/30
207-08-9	Benzo(k)fluoranthene	50	44.3	89	42.9	86	3	40-140/30
218-01-9	Chrysene	50	38.0	76	39.3	79	3	40-140/30
53-70-3	Dibenzo(a,h)anthracene	50	32.5	65	34.2	68	5	40-140/30
206-44-0	Fluoranthene	50	38.3	77	41.6	83	8	40-140/30
86-73-7	Fluorene	50	36.7	73	39.4	79	7	40-140/30
193-39-5	Indeno(1,2,3-cd)pyrene	50	35.2	70	37.0	74	5	40-140/30
91-57-6	2-Methylnaphthalene	50	32.2	64	33.3	67	3	40-140/30
91-20-3	Naphthalene	50	37.0	74	37.5	75	1	40-140/30
85-01-8	Phenanthrene	50	35.6	71	36.7	73	3	40-140/30
129-00-0	Pyrene	50	41.8	84	41.2	82	1	40-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	48%	47%	15-110%
4165-62-2	Phenol-d5	28%	28%	15-110%
118-79-6	2,4,6-Tribromophenol	72%	74%	15-110%
4165-60-0	Nitrobenzene-d5	81%	80%	30-130%
321-60-8	2-Fluorobiphenyl	73%	75%	30-130%
1718-51-0	Terphenyl-d14	71%	70%	30-130%

Semivolatile Internal Standard Area Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Check Std: MSF2376-CC2374 **Injection Date:** 10/06/10
Lab File ID: F49769A.D **Injection Time:** 11:53
Instrument ID: GCMSF **Method:** SW846 8270C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	184140	5.09	667477	6.35	371847	8.73	594044	11.22	673978	16.16	686651	18.68
Upper Limit [a]	368280	5.59	1334954	6.85	743694	9.23	1188088	11.72	1347956	16.66	1373302	19.18
Lower Limit [b]	92070	4.59	333739	5.85	185924	8.23	297022	10.72	336989	15.66	343326	18.18

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	141097	5.10	528030	6.35	286475	8.73	448942	11.22	489690	16.15	516036	18.68
ZZZZZZ	150302	5.10	567209	6.35	310749	8.73	491994	11.21	538484	16.15	513499	18.67
ZZZZZZ	155318	5.10	551812	6.35	310860	8.73	489001	11.22	583011	16.18	603947	18.70
ZZZZZZ	147788	5.09	569048	6.34	322989	8.73	526121	11.21	550851	16.15	576741	18.67
OP22833-MB	135667	5.10	514244	6.35	294858	8.73	465419	11.22	505886	16.15	548198	18.67
OP22833-BS	138154	5.09	524397	6.35	296360	8.73	488048	11.22	512203	16.15	536538	18.67
OP22833-BSD	144518	5.10	548915	6.35	313965	8.73	507184	11.22	531962	16.15	582236	18.67
M94572-3	141926	5.09	555885	6.34	318020	8.73	504552	11.22	561736	16.15	608196	18.67
ZZZZZZ	114483	5.09	431636	6.34	238496	8.72	374859	11.22	405039	16.15	444925	18.68

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Check Std: MSF2375-CC2374 **Injection Date:** 10/06/10
Lab File ID: F49769A.D **Injection Time:** 11:53
Instrument ID: GCMSF **Method:** SW846 8270C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	184140	5.09	667477	6.35	371847	8.73	594044	11.22	673978	16.16	686651	18.68
Upper Limit [a]	368280	5.59	1334954	6.85	743694	9.23	1188088	11.72	1347956	16.66	1373302	19.18
Lower Limit [b]	92070	4.59	333739	5.85	185924	8.23	297022	10.72	336989	15.66	343326	18.18

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	141097	5.10	528030	6.35	286475	8.73	448942	11.22	489690	16.15	516036	18.68
ZZZZZZ	150302	5.10	567209	6.35	310749	8.73	491994	11.21	538484	16.15	513499	18.67
ZZZZZZ	155318	5.10	551812	6.35	310860	8.73	489001	11.22	583011	16.18	603947	18.70
ZZZZZZ	147788	5.09	569048	6.34	322989	8.73	526121	11.21	550851	16.15	576741	18.67
OP22833-MB	135667	5.10	514244	6.35	294858	8.73	465419	11.22	505886	16.15	548198	18.67
OP22833-BS	138154	5.09	524397	6.35	296360	8.73	488048	11.22	512203	16.15	536538	18.67
OP22833-BSD	144518	5.10	548915	6.35	313965	8.73	507184	11.22	531962	16.15	582236	18.67
M94572-3	141926	5.09	555885	6.34	318020	8.73	504552	11.22	561736	16.15	608196	18.67
ZZZZZZ	114483	5.09	431636	6.34	238496	8.72	374859	11.22	405039	16.15	444925	18.68

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Check Std:	MSI2362-CC2346	**Injection Date:**	10/06/10
Lab File ID:	I68283.D	**Injection Time:**	14:14
Instrument ID:	GCMSI	**Method:**	SW846 8270C BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	40540	5.49	162348	6.80	95931	9.27	168724	11.79	172984	16.75	125315	19.29
Upper Limit [a]	81080	5.99	324696	7.30	191862	9.77	337448	12.29	345968	17.25	250630	19.79
Lower Limit [b]	20270	4.99	81174	6.30	47966	8.77	84362	11.29	86492	16.25	62658	18.79

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP22834-MB	36634	5.49	150425	6.80	83008	9.27	139807	11.79	126557	16.75	103712	19.29
OP22834-BS	41970	5.49	162981	6.80	90331	9.27	139336	11.79	134760	16.75	104967	19.29
OP22834-BSD	40387	5.49	155102	6.80	87736	9.27	145476	11.79	156429	16.75	134240	19.29
M94572-3A	35660	5.49	145575	6.80	80060	9.26	135918	11.79	133939	16.75	126337	19.29

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Method: SW846 8270C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
M94572-3	F49778.D	87.0	81.0	88.0
OP22833-BS	F49776.D	100.0	93.0	102.0
OP22833-BSD	F49777.D	107.0	99.0	108.0
OP22833-MB	F49775.D	79.0	74.0	87.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	30-130%
S2 = 2-Fluorobiphenyl	30-130%
S3 = Terphenyl-d14	30-130%

Semivolatile Surrogate Recovery Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Method: SW846 8270C BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
M94572-3A	I68287.D	37.0	20.0	67.0	64.0	62.0	63.0
OP22834-BS	I68285.D	48.0	28.0	72.0	81.0	73.0	71.0
OP22834-BSD	I68286.D	47.0	28.0	74.0	80.0	75.0	70.0
OP22834-MB	I68284.D	42.0	23.0	65.0	72.0	70.0	79.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	15-110%
S2 = Phenol-d5	15-110%
S3 = 2,4,6-Tribromophenol	15-110%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

New England ACCUTEST LABORATORIES

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22823-MB	BB32953.D	1	10/03/10	SL	10/02/10	OP22823	GBB2159

The QC reported here applies to the following samples: **Method:** EPA 504

M94572-1

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.015	0.014	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	108%	59-170%
460-00-4	Bromofluorobenzene (S)	110%	59-170%

Blank Spike/Blank Spike Duplicate Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22823-BS	BB32954.D	1	10/03/10	SL	10/02/10	OP22823	GBB2159
OP22823-BSD	BB32955.D	1	10/03/10	SL	10/02/10	OP22823	GBB2159

The QC reported here applies to the following samples: **Method:** EPA 504

M94572-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
106-93-4	1,2-Dibromoethane	0.071	0.11	155* [a]	0.13	183* [a]	17	70-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	Bromofluorobenzene (S)	121%	132%	59-170%
460-00-4	Bromofluorobenzene (S)	127%	140%	59-170%

(a) Samples are non-detect for analyte.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22823-MS	BB32956.D	1	10/03/10	SL	10/02/10	OP22823	GBB2159
OP22823-MSD	BB32957.D	1	10/03/10	SL	10/02/10	OP22823	GBB2159
M94535-13	BB32958.D	1	10/03/10	SL	10/02/10	OP22823	GBB2159

The QC reported here applies to the following samples: **Method:** EPA 504

M94572-1

CAS No.	Compound	M94535-13 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-93-4	1,2-Dibromoethane	ND		0.071	0.13	183* [a]	0.15	211* [a]	14	65-135/30

CAS No.	Surrogate Recoveries	MS	MSD	M94535-13	Limits
460-00-4	Bromofluorobenzene (S)	135%	157%	133%	59-170%
460-00-4	Bromofluorobenzene (S)	144%	161%	132%	59-170%

(a) Samples are non-detect for analyte.

Volatile Surrogate Recovery Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Method: EPA 504 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
M94572-1	BB32960.D	220.0* [c]	201.0* [c]
OP22823-BS	BB32954.D	121.0	127.0
OP22823-BSD	BB32955.D	132.0	140.0
OP22823-MB	BB32953.D	108.0	110.0
OP22823-MS	BB32956.D	135.0	144.0
OP22823-MSD	BB32957.D	157.0	161.0

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	59-170%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2
(c) Outside control limits due to possible matrix interference.

New England ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22841-MB	YZ60832A.D	1	10/04/10	CZ	10/04/10	OP22841	GYZ2592

The QC reported here applies to the following samples: **Method:** EPA 608

M94572-1, M94572-3

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.50	0.029	ug/l	
11104-28-2	Aroclor 1221	ND	0.50	0.060	ug/l	
11141-16-5	Aroclor 1232	ND	0.50	0.076	ug/l	
53469-21-9	Aroclor 1242	ND	0.50	0.036	ug/l	
12672-29-6	Aroclor 1248	ND	0.50	0.058	ug/l	
11097-69-1	Aroclor 1254	ND	0.50	0.067	ug/l	
11096-82-5	Aroclor 1260	ND	0.50	0.023	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	95%	31-154%
877-09-8	Tetrachloro-m-xylene	95%	31-154%
2051-24-3	Decachlorobiphenyl	106%	10-148%
2051-24-3	Decachlorobiphenyl	108%	10-148%

Blank Spike Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22841-BS	YZ60833A.D	1	10/04/10	CZ	10/04/10	OP22841	GYZ2592

The QC reported here applies to the following samples: **Method:** EPA 608

M94572-1, M94572-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
12674-11-2	Aroclor 1016	2	1.8	90	50-114
11104-28-2	Aroclor 1221		ND		15-178
11141-16-5	Aroclor 1232		ND		10-215
53469-21-9	Aroclor 1242		ND		39-150
12672-29-6	Aroclor 1248		ND		38-158
11097-69-1	Aroclor 1254		ND		29-131
11096-82-5	Aroclor 1260	2	1.9	95	8-127

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	93%	31-154%
877-09-8	Tetrachloro-m-xylene	86%	31-154%
2051-24-3	Decachlorobiphenyl	100%	10-148%
2051-24-3	Decachlorobiphenyl	103%	10-148%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP22841-MS	YZ60836A.D	1	10/04/10	CZ	10/04/10	OP22841	GYZ2592
OP22841-MSD	YZ60837A.D	1	10/04/10	CZ	10/04/10	OP22841	GYZ2592
M94706-2	YZ60838A.D	1	10/04/10	CZ	10/04/10	OP22841	GYZ2592

The QC reported here applies to the following samples: **Method:** EPA 608

M94572-1, M94572-3

CAS No.	Compound	M94706-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		2	1.9	95	1.8	90	5	50-114/30
11104-28-2	Aroclor 1221	ND			ND		ND		nc	15-178/30
11141-16-5	Aroclor 1232	ND			ND		ND		nc	10-215/30
53469-21-9	Aroclor 1242	ND			ND		ND		nc	39-150/30
12672-29-6	Aroclor 1248	ND			ND		ND		nc	38-158/30
11097-69-1	Aroclor 1254	ND			ND		ND		nc	29-131/30
11096-82-5	Aroclor 1260	ND		2	2.0	100	1.9	95	5	8-127/30

CAS No.	Surrogate Recoveries	MS	MSD	M94706-2	Limits
877-09-8	Tetrachloro-m-xylene	92%	88%	92%	31-154%
877-09-8	Tetrachloro-m-xylene	90%	85%	96%	31-154%
2051-24-3	Decachlorobiphenyl	101%	96%	106%	10-148%
2051-24-3	Decachlorobiphenyl	103%	98%	110%	10-148%

Semivolatile Surrogate Recovery Summary

Job Number: M94572
Account: HWIMAB Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Method: EPA 608 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
M94572-1	YZ60909.D	99.0	102.0	102.0	101.0
M94572-3	YZ60910.D	100.0	99.0	97.0	98.0
OP22841-BS	YZ60833A.D	93.0	86.0	100.0	103.0
OP22841-MB	YZ60832A.D	95.0	95.0	106.0	108.0
OP22841-MS	YZ60836A.D	92.0	90.0	101.0	103.0
OP22841-MSD	YZ60837A.D	88.0	85.0	96.0	98.0

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	31-154%
S2 = Decachlorobiphenyl	10-148%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

New England ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M94572
Account: HWIMAB - Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

QC Batch ID: MP15985
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 09/29/10

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.022	.047	0.031	<0.20

Associated samples MP15985: M94572-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M94572
Account: HWIMAB - Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

QC Batch ID: MP15985
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 09/29/10 09/29/10

Metal	M94514-1 Original	MS	Spikelot HGRWS1	% Rec	QC Limits	M94514-1 Original	DUP	RPD	QC Limits
Mercury	0.049	2.8	3	91.7	70-130	0.049	0.034	36.1 (a)	0-20

Associated samples MP15985: M94572-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) RPD acceptable due to low duplicate and sample concentrations.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M94572
Account: HWIMAB - Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

QC Batch ID: MP15985
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 09/29/10

Metal	BSP Result	Spikelot HGRWS1	% Rec	QC Limits
Mercury	2.9	3	96.7	85-115

Associated samples MP15985: M94572-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M94572
Account: HWIMAB - Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

QC Batch ID: MP15995
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 10/01/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	17	17		
Antimony	6.0	1.2	1.2		
Arsenic	4.0	1.1	1.9		
Barium	50	.36	3.7		
Beryllium	4.0	.18	.18		
Boron	100	.34	1.5		
Cadmium	4.0	.08	.12		
Calcium	5000	18	39		
Chromium	10	.48	.53	0.0	<10
Cobalt	50	.19	.28		
Copper	25	.92	.92		
Gold	50	1.3	1.7		
Iron	100	5.2	5.2	3.8	<100
Lead	5.0	1	1.5		
Magnesium	5000	72	72		
Manganese	15	.14	.9		
Molybdenum	100	.15	.64		
Nickel	40	.25	.3		
Palladium	50	2.3	2.5		
Platinum	50	8.4	8.4		
Potassium	5000	44	44		
Selenium	10	1.1	1.7		
Silicon	100	6.4	7.2		
Silver	5.0	1	1		
Sodium	5000	29	31		
Strontium	10	.4	.4		
Thallium	5.0	.65	.74		
Tin	100	.45	.45		
Titanium	50	.84	.84		
Tungsten	100	5.8	12		
Vanadium	10	.87	1.1		
Zinc	20	.27	2		

Associated samples MP15995: M94572-1, M94572-3

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M94572
Account: HWIMAB - Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

QC Batch ID: MP15995
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M94572
Account: HWIMAB - Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

QC Batch ID: MP15995
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 10/01/10 10/01/10

Metal	M94593-1 Original	MS	Spikelot MPICP	% Rec	QC Limits	M94593-1 Original	DUP	RPD	QC Limits
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium	3.3	485	500	96.3	70-130	3.3	3.6	8.7	0-20
Cobalt									
Copper	anr								
Gold	anr								
Iron	58.0	2040	2000	99.1	70-130	58.0	63.5	9.1	0-20
Lead	anr								
Magnesium									
Manganese									
Molybdenum									
Nickel	anr								
Palladium									
Platinum									
Potassium									
Selenium									
Silicon									
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin	anr								
Titanium									
Tungsten									
Vanadium									
Zinc									

Associated samples MP15995: M94572-1, M94572-3

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M94572
Account: HWIMAB - Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

QC Batch ID: MP15995
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M94572
Account: HWIMAB - Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

QC Batch ID: MP15995
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 10/01/10

Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium	498	500	99.6	85-115
Cobalt				
Copper	anr			
Gold	anr			
Iron	1990	2000	99.5	85-115
Lead	anr			
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Palladium				
Platinum				
Potassium				
Selenium				
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin	anr			
Titanium				
Tungsten				
Vanadium				
Zinc				

Associated samples MP15995: M94572-1, M94572-3

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M94572
Account: HWIMAB - Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

QC Batch ID: MP15995
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: M94572
Account: HWIMAB - Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

QC Batch ID: MP15995
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 10/01/10

Metal	M94593-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium	3.30	0.00	100.0(a)	0-10
Cobalt				
Copper	anr			
Gold	anr			
Iron	58.0	74.4	28.3 (a)	0-10
Lead	anr			
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Palladium				
Platinum				
Potassium				
Selenium				
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin	anr			
Titanium				
Tungsten				
Vanadium				
Zinc				

Associated samples MP15995: M94572-1, M94572-3

SERIAL DILUTION RESULTS SUMMARY

Login Number: M94572
Account: HWIMAB - Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

QC Batch ID: MP15995 Methods: EPA 200.7
Matrix Type: AQUEOUS Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

New England ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M94572
Account: HWIMAB - Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GN32993	1.0	0.0	mg/l	10	9.7	97.0	80-120%
Chromium, Hexavalent	GN32939	0.010	0.0	mg/l	.1	0.10	100.0	85-115%
Chromium, Hexavalent	GN32939			mg/l	.1	0.10	100.0	85-115%
HEM Petroleum Hydrocarbons	GP12095/GN32996	4.0	0.0	mg/l	20.0	15.1	75.5	66-114%
Phenols	GP12085/GN32966	0.050	<0.050	mg/l	0.20	0.20	100.0	80-120%
Solids, Total Suspended	GN32951	4.0	0.0	mg/l				
Total Residual Chlorine	GN32940	0.050	0.0	mg/l	1	1.0	100.0	80-120%

Associated Samples:
Batch GN32939: M94572-1
Batch GN32940: M94572-1
Batch GN32951: M94572-1
Batch GN32993: M94572-1
Batch GP12085: M94572-1, M94572-3
Batch GP12095: M94572-1, M94572-3
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M94572
Account: HWIMAB - Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chloride	GN32993	M94572-1	mg/l	905	905	0.0	0-20%
Chromium, Hexavalent	GN32939	M94574-1	mg/l	0.079	0.082	3.7	0-20%
HEM Petroleum Hydrocarbons	GP12095/GN32996	M94612-1	mg/l	0.0	0.0	0.0	0-24%
Phenols	GP12085/GN32966	M94572-1	mg/l	<0.050	<0.050	0.0	0-20%
Solids, Total Suspended	GN32951	M94512-1	mg/l	3.0	3.0	0.0	0-20%
Total Residual Chlorine	GN32940	M94572-1	mg/l	0.0	0.0	0.0	0-20%

Associated Samples:
Batch GN32939: M94572-1
Batch GN32940: M94572-1
Batch GN32951: M94572-1
Batch GN32993: M94572-1
Batch GP12085: M94572-1, M94572-3
Batch GP12095: M94572-1, M94572-3
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: M94572
Account: HWIMAB - Honeywell International Inc.
Project: CHMHLMAB:Brighton MA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GN32993	M94572-1	mg/l	905	200	1100	97.5	75-125%
Chromium, Hexavalent	GN32939	M94574-1	mg/l	0.079	.1	0.18	101.0	85-115%
HEM Petroleum Hydrocarbons	GP12095/GN32996	M94612-1	mg/l	0.0	20.4	15.0	73.5	66-114%
Phenols	GP12085/GN32966	M94572-1	mg/l	<0.050	0.20	0.19	95.0	75-125%
Total Residual Chlorine	GN32940	M94572-1	mg/l	0.0	1	1.0	100.0	75-125%

Associated Samples:
Batch GN32939: M94572-1
Batch GN32940: M94572-1
Batch GN32993: M94572-1
Batch GP12085: M94572-1, M94572-3
Batch GP12095: M94572-1, M94572-3
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

New England ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

(Accutest New Jersey)

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle

cw

ACCUTEST

CHAIN OF CUSTODY

495 Technology Ctr, West, Building One
Marlboro, MA 01752
508 481-6200 FAX: 508 481-7753

Accutest Job #: M 94572
Accutest Quote #:

Client Information	Facility Information
Accutest (Name)	Project Name
495 Technology Ctr,West, Bldg One (Address)	Location
Marlboro (City) MA (State) 1752 (Zip)	Project No. M94572
Send Report to: Phone #: (508) 481-6200	FAX #: (508) 481-7753

Analytical Information: AGMS, ASMS, COMS, CUMS, NIMS, PBMS, SBMS, SEMS, ZNMS | CUMS, NIMS, PBMS, ZNMS

Field ID / Point of Collection	Date	Time	Sampled By	Matrix	# of bottles	HCL	NaOH	HNO3	H2So4	None	AGMS, ASMS, COMS, CUMS, NIMS, PBMS, SBMS, SEMS, ZNMS	CUMS, NIMS, PBMS, ZNMS				ME31
-1	9/28			GW							X					ME31
-3	↓			GW								X				

Turnaround Information

- [ ] 21 Day Standard
- [ ] 14 Day
- [x] 7 Days EMERGENCY
- [ ] Other ______ (Days)

Approved By:

21 Day Turnaround Hardcopy, Emergency or RUSH is FAX Data unless previously approved.

Data Deliverable Information

- [ ] NJ Reduced
- [ ] NJ Full
- [ ] FULL CLP
- [ ] Disk Deliverable
- [ ] Other (Specify) MLP
- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] State Forms

Comments / Remarks

ICP MS 6020

NJ

TKC# 8729 8580 2676

Sample Custody must be documented below each time samples change possesion, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 [signature]	9/30/10	1 FedEx	2 FedEx	10/1/10 0920	2 [signature]
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by Sampler: 5	Date Time:	Received By: 5	Seal #	Preserved where applicable ☒	On Ice ☒ 3.4°C

TnS 10/1/10

TnS 10/1/10

1A

TnS

11.1

11

M94572: Chain of Custody
Page 1 of 1
Accutest New Jersey

Internal Sample Tracking Chronicle

Accutest Labs of New England, Inc.

Job No: M94572

HWIMAB: CHMHLMAB:Brighton MA
Project No: HWIMAB10791

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M94572-1 Collected: 28-SEP-10 09:31 By: INF-092810-FD				Received: 28-SEP-10	By: RL	
M94572-1	SW846 6020A	04-OCT-10 23:34	RP	02-OCT-10	RP	AGMS, ASMS, CDMS, CUMS, NIMS, PBMS, SBMS, ZNMS
M94572-1	SW846 6020A	04-OCT-10 23:38	RP	02-OCT-10	RP	SEMS
M94572-3 Collected: 28-SEP-10 08:05 By: INF-0992810-MC				Received: 28-SEP-10	By: RL	
M94572-3	SW846 6020A	04-OCT-10 23:42	RP	02-OCT-10	RP	CUMS, NIMS, PBMS, ZNMS

New England ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

(Accutest New Jersey)

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M94572
Account: ALNE - Accutest Labs of New England, Inc.
Project: HWIMAB: CHMHLMAB:Brighton MA

QC Batch ID: MP54994
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 10/02/10

Metal	RL	IDL	MDL	MB raw	final
Antimony	1.0	.1	.16	0.84	<1.0
Arsenic	2.0	.52	.36	-0.49	<2.0
Barium	2.0	.054	.13		
Beryllium	1.0	.022	.11		
Boron	10	.77	1.5		
Cadmium	1.0	.052	.13	-0.10	<1.0
Calcium	500	14	16		
Chromium	8.0	.1	.3		
Cobalt	1.0	.006	.072		
Copper	8.0	.1	.46	-0.014	<8.0
Iron	100	3.1	7.1		
Lead	1.0	.02	.05	0.094	<1.0
Magnesium	500	.61	5.7		
Manganese	1.0	.03	.046		
Molybdenum	2.0	.79	.19		
Nickel	8.0	.13	.23	0.39	<8.0
Selenium	5.0	1	.28	0.68	<5.0
Silver	4.0	.022	.099	-0.020	<4.0
Sodium	500	17	3		
Strontium	2.0	.024	.03		
Thallium	1.0	.03	.067		
Tin	10	.41	.11		
Titanium	2.0	.14	.21		
Uranium	2.0				
Vanadium	8.0	.86	1.5		
Zinc	8.0	1.6	1.7	1.4	<8.0

Associated samples MP54994: M94572-1, M94572-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M94572
Account: ALNE - Accutest Labs of New England, Inc.
Project: HWIMAB: CHMHLMAB:Brighton MA

QC Batch ID: MP54994
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 10/02/10

Metal	M94520-2 Original	MS	Spikelot MPIRW1	% Rec	QC Limits
Aluminum	anr				
Antimony	0.82	558	500	111.4	75-125
Arsenic	0.0	2010	2000	100.5	75-125
Barium	anr				
Beryllium	anr				
Boron					
Cadmium	0.0	49.6	50	99.2	75-125
Calcium	anr				
Chromium	anr				
Cobalt	anr				
Copper	1.6	242	250	96.2	75-125
Iron	anr				
Lead	1.6	492	500	98.1	75-125
Magnesium	anr				
Manganese	anr				
Molybdenum					
Nickel	1.2	478	500	95.4	75-125
Potassium	anr				
Selenium	0.0	2050	2000	102.5	75-125
Silver	0.0	50.2	50	100.4	75-125
Sodium	anr				
Strontium					
Thallium	anr				
Tin					
Titanium					
Uranium					
Vanadium	anr				
Zinc	14.0	515	500	100.2	75-125

Associated samples MP54994: M94572-1, M94572-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M94572
Account: ALNE - Accutest Labs of New England, Inc.
Project: HWIMAB: CHMHLMAB:Brighton MA

QC Batch ID: MP54994
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 10/02/10

Metal	M94520-2 Original	MSD	Spikelot MPIRW1	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	0.82	542	500	108.2	2.9	20
Arsenic	0.0	1950	2000	97.5	3.0	20
Barium	anr					
Beryllium	anr					
Boron						
Cadmium	0.0	47.5	50	95.0	4.3	20
Calcium	anr					
Chromium	anr					
Cobalt	anr					
Copper	1.6	229	250	91.0	5.5	20
Iron	anr					
Lead	1.6	480	500	95.7	2.5	20
Magnesium	anr					
Manganese	anr					
Molybdenum						
Nickel	1.2	463	500	92.4	3.2	20
Potassium	anr					
Selenium	0.0	1990	2000	99.5	3.0	20
Silver	0.0	50.0	50	100.0	0.4	20
Sodium	anr					
Strontium						
Thallium	anr					
Tin						
Titanium						
Uranium						
Vanadium	anr					
Zinc	14.0	504	500	98.0	2.2	20

Associated samples MP54994: M94572-1, M94572-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M94572
Account: ALNE - Accutest Labs of New England, Inc.
Project: HWIMAB: CHMHLMAB:Brighton MA

QC Batch ID: MP54994
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 10/02/10

Metal	LCS Result	Spikelot MPLCW3	% Rec	QC Limits
Aluminum	anr			
Antimony	537	500	107.4	80-120
Arsenic	440	500	88.0	80-120
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	480	500	96.0	80-120
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	481	500	96.2	80-120
Iron	anr			
Lead	553	500	110.6	80-120
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	487	500	97.4	80-120
Potassium	anr			
Selenium	470	500	94.0	80-120
Silver	208	200	104.0	80-120
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Uranium				
Vanadium	anr			
Zinc	424	500	84.8	80-120

Associated samples MP54994: M94572-1, M94572-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: M94572
Account: ALNE - Accutest Labs of New England, Inc.
Project: HWIMAB: CHMHLMAB:Brighton MA

QC Batch ID: MP54994
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 10/02/10

Metal	M94520-2 Original	SDL 2:10	%DIF	QC Limits
Aluminum	anr			
Antimony	0.823	1.14	39.0 (a)	0-10
Arsenic	0.00	0.00	NC	0-10
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	1.56	1.61	3.2	0-10
Iron	anr			
Lead	1.62	1.71	5.5	0-10
Magnesium	anr			
Molybdenum				
Nickel	1.25	3.19	155.7(a)	0-10
Potassium	anr			
Selenium	0.00	0.00	NC	0-10
Silver	0.00	0.00	NC	0-10
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Uranium				
Vanadium	anr			
Zinc	14.0	19.2	37.6 (a)	0-10

Associated samples MP54994: M94572-1, M94572-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Exhibit 2 – Dilution Factor Calculations

DF = (Qd + Qs)/Qd

Where:
DF = Dilution Factor
Qd = Maximum flow rate of the discharge in cubic feet per second (cfs)
Qs = Receiving water 7Q10 flow where, 7Q10 = The minimum flow for 7 consecutive days with a recurrence interval of 10 years

The receiving water for the MC system is the Charles River via storm drain.

The Charles River 7Q10 Flow is based on information obtained from USGS stream stats website and using the approximate location of the Outfall into the Charles River (Outfall #25E037) = **23.6 cubic feet per second** (http://streamstats.usgs.gov)

1.0 gpm = .00223 cfs

MC system effluent maximum flow recorded since March 2006:
60 gallons per minute **= 0.1338 cfs**

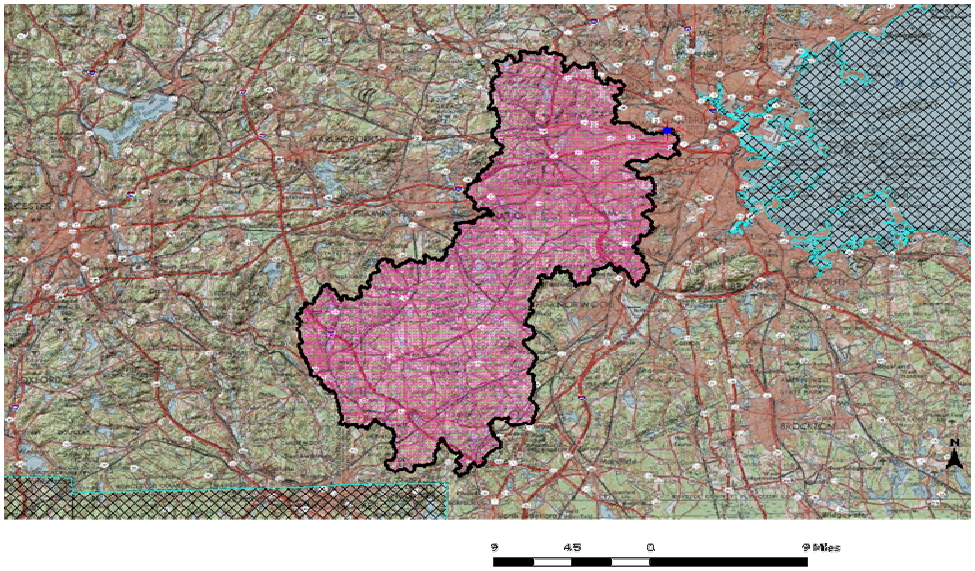
DF=(0.1338cfs+23.6cfs)/0.1338cfs
DF=(23.7338)/0.1338
DF=177.38

Location	Parameter	September 28, 2010 Influent Concentration (ug/L)	Effluent Limit from Appendix IV with DF Applied (ug/L)
Migration Control	COPPER	**12.5**	520
	IRON	**173**	5000
	LEAD	**0.18**	132
	NICKEL	**20.3**	2380
	ZINC	**2.6**	1480

ug/L: micrograms/ liters

USGS Massachusetts StreamStats

StreamStats Print Page



Legend

- GlobalWatershedPoint
- GlobalWatershed
- Excluded Areas
- nhdgages
- nhddams
- hucpoly
- Dendritic Stream Network

NHD Flowline

- <all other values>
- ArtificialPath
- CanalDitch
- Coastline
- Connector
- Pipeline
- StreamRiver
- Underground Conduit

Stream Gages

- Gaging Station, Continuous Record
- Low Flow, Partial Record
- Peak Flow, Partial Record
- Peak and Low Flow, Partial Record
- Miscellaneous Record
- Unknown

9/24/2010 8:53:34 AM

USGS Massachusetts StreamStats

Streamstats Ungaged Site Report

Date: Fri Sep 24 2010 08:52:44 Mountain Daylight Time
Site Location: Massachusetts
NAD27 Latitude: 42.3705 (42 22 14)
NAD27 Longitude: -71.1323 (-71 07 56)
NAD83 Latitude: 42.3706 (42 22 14)
NAD83 Longitude: -71.1318 (-71 07 55)
ReachCode: 01090001000111
Measure: 48.13
Drainage Area: 280 mi2

Low Flows Basin Characteristics

100% Statewide Low Flow (280 mi2)

Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	280 (above max value 149)	1.61	149
Mean Basin Slope from 250K DEM (percent)	2.34	0.32	24.6
Stratified Drift per Stream Length (square mile per mile)	0.22	0	1.29
Massachusetts Region (dimensionless)	0	0	1

Warning: Some parameters are outside the suggested range. Estimates will be extrapolations with unknown errors.

Probability of Perennial Flow Basin Characteristics

100% Perennial Flow Probability (280 mi2)

Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	280 (above max value 1.99)	0.01	1.99
Percent Underlain By Sand And Gravel (percent)	47.39	0	100
Percent Forest (percent)	42.38	0	100
Massachusetts Region (dimensionless)	0	0	1

Warning: Some parameters are outside the suggested range. Estimates will be extrapolations with unknown errors.

Low Flows Streamflow Statistics

Statistic	Flow (ft^3/s)	Prediction Error (percent)	Equivalent years of record	90-Percent Prediction Interval	
				Minimum	Maximum
D50	299				
D60	246				
D70	168				
D75	137				
D80	106				
D85	85.2				
D90	65.9				
D95	44.5				
D98	29.7				
D99	24.6				
M7D2Y	47.8				
AUGD50	91.2				
M7D10Y	23.6				

The equation for estimating the probability of perennial flow is applicable for most areas of Massachusetts except eastern Buzzards Bay, Cape Cod, and the Island regions. The estimate obtained from the equation assumes natural flow conditions at the site. The equation also is best used for sites with drainage areas between 0.01 to 1.99 mi2, as errors beyond for basins beyond these bounds are unknown.

Probability of Perennial Flow Statistics

Statistic	Value	Standard Error (percent)
PROBPEREN	1	

Exhibit 3 – MSDS Sheets

USFilter

Material Safety Data Sheet

SECTION 1 – CHEMICAL PRODUCT AND COMPANY INFORMATION

****

Product Name: ACTIVATED CARBON, *AquaCarb™ Series, VOCarb™ Series, AC Series, VC Series, BevCarb™ Series, and UltraCarb™ Series*
Part Number:100 **Chemical Family**: activated carbon

Manufacturer's Name: U.S. FILTER WESTATES CARBON
Address: 5375 South Boyle Avenue, Los Angeles, CA 90058
Product/Technical Information Phone Number: (323) 277-1500
Medical/Handling Emergency Phone Number: CHEMTREC 1-800-424-9300
Transportation Emergency Phone Number: CHEMTREC 1-800-424-9300

Revision Date/Revision Number: August 28, 2002/Revision #2

SECTION 2 – COMPOSITION INFORMATION

****

Chemical Name	Percent by Weight	CAS#
Activated Carbon	100	7440-44-0

SECTION 3 – HAZARDS IDENTIFICATION

****

Appearance & Odor: black granules without taste or odor
Emergency Overview: Dust that contacts eyes may be irritating or cause mechanical injury. Dust may cause slight skin irritation. Dust may be irritating to the respiratory tract and cause coughing or sneezing. Ingestion of powder may be irritating to the gastrointestinal tract. Warning: Wet activated carbon depletes oxygen from the air and therefore dangerously low levels of oxygen may be encountered. Whenever workers enter a vessel containing activated carbon, the vessel's oxygen content should be determined and work procedures for potentially low oxygen areas should be followed.
Fire &Explosion Hazards: When burned**,** hazardous products of combustion including carbon oxides can occur. Irritating and/or toxic gases due to decomposition of the product may be generated during a fire. Fight fire from a safe distance from a protected location. Contact with strong oxidizers such as ozone or liquid oxygen may cause rapid combustion.
Primary Route(s) of Exposure: Eye contact, skin contact, ingestion, or inhalation are all possible routes of entry.
Inhalation- Acute Effects: Dust may be irritating to the respiratory tract and cause coughing or sneezing.
Skin Contact-Acute Effects: Dust may cause slight skin irritation.

SECTION 3 – HAZARDS IDENTIFICATION (continued)

****

Eye Contact- Acute Effects: Dust that contacts eyes may be irritating or cause mechanical injury.
Ingestion- Acute Effects: Ingestion of powder may be irritating to the gastrointestinal tract.

SECTION 4 – FIRST AID MEASURES

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Inhalation First Aid: Remove affected person from area to fresh air and provide oxygen if breathing is difficult. Give artificial respiration ONLY if breathing has stopped and give CPR ONLY if there is no breathing and no pulse. Obtain medical attention.
Skin Contact First Aid: Wash skin for 5 minutes with flowing water and soap. Clothing should be discarded or washed before reuse. Obtain medical assistance if irritation develops. DO NOT instruct person to neutralize affected skin area.
Eye Contact First Aid: Immediately irrigate eyes with flowing water continuously for 15 minutes while holding eyes open. Contacts should be removed before or during flushing. Seek medical assistance if irritation develops. DO NOT instruct person to neutralize.
Ingestion First Aid: Vomiting may need to be induced if directed by a physician or poison control center. DO NOT have unqualified personnel induce vomiting. Obtain medical attention immediately.
Medical Conditions Aggravated: Respiratory ailments may be aggravated by exposure to this product.
Note to Physician: No specific antidote, treat patient symptomatically.

SECTION 5 – FIRE FIGHTING MEASURES

****

Flash Point/Method: Nonflammable
Auto Ignition Temperature: 840°C (1,710°F)
Upper/Lower Explosion Limits: not applicable

Extinguishing Media: Water spray, carbon dioxide, foam or dry chemical
Fire Fighting Procedures: In the event of a fire, wear full protective clothing and NIOSH approved self-contained breathing apparatus with full face piece, operated in the positive pressure mode.
Fire & Explosion Hazards: When burned**,** hazardous products of combustion including carbon oxides can occur. Irritating and/or toxic gases due to decomposition of the product may be generated during a fire. Fight fire from a safe distance from a protected location. Contact with strong oxidizers such as ozone or liquid oxygen may cause rapid combustion.
Hazardous Products of Decomposition and /or Combustion: Carbon oxides**.**

NFPA Ratings:

HEALTH-1 FLAMMABILITY- 0 REACTIVITY-0 OTHER- none

SECTION 6 – ACCIDENTAL RELEASE MEASURES

****

Clean up spills in a manner that does not disperse dust into the air. Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure, and removal of material from eyes, skin, and clothing. Dispose of virgin (unused) carbon (waste or spillage) in a facility permitted for non-hazardous wastes. Spent (used) carbon should be disposed of in accordance with applicable laws. Do not reuse empty bags. Dispose of in facility permitted for non-hazardous wastes. DO NOT DUMP INTO ANY SEWERS, ON THE GROUND OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State, Local and Provincial laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

SECTION 7 – HANDLING AND STORAGE

****

Handling: Avoid dispersion into air. Keep containers dry and closed. Follow good handling and housekeeping practices to minimize spills, generation of airborne dusts, and accumulation of dusts on exposed surfaces. Use with adequate exhaust ventilation to draw dust away from workers' breathing zones. Prevent or minimize exposures to dusts by using appropriate respirators, gloves, and eye protection. Wash exposed skin areas thoroughly with soap and water. Use caution when pouring, using pneumatic transport, swirling, etc. as this material can become electrostatically charged.

Storage: Avoid breaking bags or spilling media so as to avoid possibly creating residual dust. Store in ambient atmospheric conditions. Product should be stored in a closed dry container. Maintain good housekeeping procedures. Store away from strong oxidizers such as ozone, liquid oxygen, chlorine, permanganate, etc.

General Comments: Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

SECTION 8 –PERSONAL PROTECTION/ EXPOSURE CONTROL

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Respiratory Protection: Use NIOSH/MSHA approved respiratory protection equipment appropriate to the material and/or its concentration where airborne exposure is likely. If exposures cannot be kept to a minimum with engineering controls, consult manufacturer to determine appropriate type equipment for a given application. Observe respirator use limitations specified by NIOSH/MSHA or the manufacturer.

Skin Protection: Wear appropriate dust resistant clothing and gloves.

Eye Protection: Safety glasses with side shields are recommended for any type of handling. Where eye contact or dusty conditions may be likely, dust tight goggles are recommended.

SECTION 8 –PERSONAL PROTECTION/ EXPOSURE CONTROL (continued)

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Ventilation Protection: Provide ventilation if necessary to minimize exposure. Dilute ventilation acceptable, but local mechanical exhaust ventilation preferred, if practical, at sources of air contamination such as open process equipment. The following publication offers ventilation guidelines and techniques: "INDUSTRIAL VENTILATION, A MANUAL OF RECOMMENDED PRACTICE" available from the ACGIH.
Other Protection: Safety showers, with quick opening valves which stay open, and eye wash fountains, or other means of washing the eyes with a gentle flow of cool to tepid tap water, should be readily available in all areas where this material is handled or stored. Water should be supplied through insulated and heat-traced lines to prevent freeze-ups in cold weather.

Exposure Limits:
OSHA PEL-TWA: 15 mg/m^3 (total), 5 mg/ m^3 (resp)
OSHA PEL-STEL: 10 mg/m^3

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

****

Appearance & Odor: black granules without taste or odor

Vapor Pressure: zero	**Vapor Density (Air=1):** not applicable
Boiling Point: not applicable	**Melting Point**: not applicable
Specific Gravity: 0.25 - 0.60 g/cc	**Solubility in Water**: Insoluble
Volatile Percentage: 0%	**pH**: not determined
Flash Point/method: Nonflammable	**Auto Ignition Temperature**: 840°C
Upper/Lower Explosion Limits: not applicable	**Other:** none

SECTION 10 – STABILITY AND REACTIVITY

****

Stability: This product is considered stable under the specified conditions of storage, shipment and use.
Incompatibilities: Contact with strong oxidizers such as ozone, liquid oxygen, chlorine, permanganate, etc. may result in rapid combustion. Avoid contact with strong acids.
Polymerization: Hazardous polymerization will not occur.
Decomposition: Hazardous decomposition will produce carbon oxides.
Conditions to avoid: Store away from strong oxidizers such as ozone, liquid oxygen, chlorine, permanganate, etc. Moist air will reduce the operating life.

SECTION 11 – TOXICOLOGICAL INFORMATION

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INHALATION – Acute: Inhalation of carbon dust is mildly irritating to the lungs and can immediately give rise to an increased mucociliary transport and airway resistance mediated by the vagus. The inhalation LC50 (Rat) is > 64.4 mg/l.
INHALATION – Chronic: There are no known chronic inhalation effects.
SKIN CONTACT – Acute: Skin contact is expected to be slightly irritating. The primary skin irritation index (rabbit) is 0.

SECTION 11 – TOXICOLOGICAL INFORMATION (continued)

****

SKIN CONTACT – Chronic: There are no known chronic dermal effects.
EYE CONTACT – Acute: Eye contact can cause conjunctivitis, epithelial hyperplasia of the cornea, as well as eczematous inflammation of the eyelids.
INGESTION – Acute: Carbon is practically nontoxic. The probable oral lethal dose (human) is greater than 15 g/kg; more than one quart (2.2 lbs) for a 70 kg (150 lb) person.
INGESTION – Chronic: There are no known chronic ingestion effects.
CARCINOGENICITY/MUTAGENICITY: There are no known carcinogenic/mutagenic effects.
REPRODUCTIVE EFFECTS: There are no known reproductive effects.
NEUROTOXICITY: There are no known neurotoxic effects.
OTHER EFFECTS: No other toxic effects of carbon are known.
TARGET ORGANS: Target organs include the respiratory system and the cardiovascular system**.**

SECTION 12 – ECOLOGICAL INFORMATION

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This material, in its original state, is not harmful to the environment.

SECTION 13 – DISPOSAL CONSIDERATIONS

****

Clean spills in a manner that does not disperse dust into the air, preferably a wet-down procedure or vacuum. If material is not contaminated, spilled media can be rebagged. Material that cannot be used or chemically reprocessed and empty containers should be disposed of in accordance with all applicable regulations. Product containers should be thoroughly emptied before disposal. Generators of waste material are required to evaluate all waste for compliance with RCRA and any local disposal procedures and regulations. NOTE: State and local regulations may be more stringent than federal regulations.

Warning: Wet activated carbon depletes oxygen from the air and therefore dangerously low levels of oxygen may be encountered. Whenever workers enter a vessel containing activated carbon, the vessel's oxygen content should be determined and work procedures for potentially low oxygen areas should be followed.

SECTION 14 – TRANSPORTATION INFORMATION

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DOT Shipping Description: Not DOT Regulated

SECTION 15 – REGULATORY INFORMATION

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CERCLA SECTION 103 (40CFR302.4): no RQ: none
SARA SECTION 302 (40CFR355.30): no
SARA SECTION 304 (40CFR355.40): no
SARA SECTION 313 (40CFR372.65): no
SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40CFR370.21):
ACUTE: yes CHRONIC: no FIRE: no REACTIVE: no SUDDEN RELEASE: no
OSHA PROCESS SAFETY (29CFR1910.119): no
CALIFORNIA PROPOSITION 65: no

SECTION 16 – OTHER INFORMATION

****

Disclaimer: The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the user thereof. It is the buyer's responsibility to ensure that its activities comply with federal, state, provincial and local laws.

Created by: James R. Graham

Exhibit 4 – Fish and Wildlife Services Species of Concern

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5087
http://www.fws.gov/newengland

January 4, 2010

To Whom It May Concern:

This project was reviewed for the presence of federally-listed or proposed, threatened or endangered species or critical habitat per instructions provided on the U.S. Fish and Wildlife Service's New England Field Office website:

(http://www.fws.gov/newengland/EndangeredSpec-Consultation.htm)

Based on the information currently available, no federally-listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service (Service) are known to occur in the project area(s). Preparation of a Biological Assessment or further consultation with us under Section 7 of the Endangered Species Act is not required.

This concludes the review of listed species and critical habitat in the project location(s) and environs referenced above. No further Endangered Species Act coordination of this type is necessary for a period of one year from the date of this letter, unless additional information on listed or proposed species becomes available.

Thank you for your cooperation. Please contact Mr. Anthony Tur at 603-223-2541 if we can be of further assistance.

Sincerely yours,

Thomas R. Chapman
Supervisor
New England Field Office

Group	Name	Population	Status	Lead Office	Recovery Plan Name	Recovery Plan Stage
Birds	Arctic peregrine Falcon (Falco		Recovery			
Birds	Piping Plover (Charadrius	except Great Lakes watershed	Threatened	Office Of The Regional Director	Piping Plover Atlantic Coast	Final Revision 1
Birds	Piping Plover (Charadrius	except Great Lakes watershed	Threatened	Office Of The Regional Director	Great Lakes & Northern Great	Final
Reptiles	Hawksbill sea turtle		Endangered	Jacksonville Ecological Services	Recovery Plan for the Hawksbill	Final Revision 1
Reptiles	Hawksbill sea turtle		Endangered	Jacksonville Ecological Services	Recovery Plan for U.S. Pacific	Final Revision 1
Reptiles	Leatherback sea turtle		Endangered	Jacksonville Ecological Services	Recovery Plan for U.S. Pacific	Final Revision 1
Reptiles	Leatherback sea turtle		Endangered	Jacksonville Ecological Services	Recovery Plan for Leatherback	Final Revision 1
Reptiles	Green sea turtle (Chelonia	except where endangered	Threatened	Jacksonville Ecological Services	Recovery Plan for U.S.	Final Revision 1
Reptiles	Green sea turtle (Chelonia	except where endangered	Threatened	Jacksonville Ecological Services	Recovery Plan for U.S. Pacific	Final Revision 1
Reptiles	Loggerhead sea turtle (Caretta		Threatened	Jacksonville Ecological Services	Recovery Plan for U.S. Pacific	Final Revision 1
Reptiles	Loggerhead sea turtle (Caretta		Threatened	Jacksonville Ecological Services	Recovery Plan for the Northwest	Final Revision 2

Fish and Wildlife Services
Endangered and Threatened Species
Suffolk, County Massachusetts