Haley & Aldrich, Inc.
465 Medford St.
Suite 2200
Boston, MA 02129

Tel: 617.886.7400
Fax: 617.886.7600
HaleyAldrich.com

29 August 2014
File No. 40798-015

U.S. Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code OEP06-4
Boston, MA 02109-3912

Attention: Remediation General Permit NOI Processing

Subject: Notice of Intent (NOI)
Temporary Construction Dewatering
Proposed Partners HealthCare Administrative Campus
399 Revolution Drive
Somerville, Massachusetts

On behalf of our client, Partners HealthCare System, and in accordance with the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP) in Massachusetts, MAG910000, this letter submits a Notice of Intent (NOI) and the applicable documentation as required by the US Environmental Protection Agency (EPA) for temporary discharge of construction site dewatering effluent under the RGP. Temporary construction dewatering is necessary to facilitate the below-grade construction associated with a new development consisting of two administrative buildings, a parking garage, and utilities. The site location and layout are shown on Figures 1 and 2.

Proposed Construction

The proposed construction consists of a new administrative campus and retail space. The proposed development will consist of one 13-story office building, with expanded ground floor footprints for retail space. An above-grade, 7-level parking structure is planned south of the office buildings. A separate structure for a future daycare facility is also proposed as a 1-story building next to the parking garage. Various outdoor spaces, loading docks, drives, and other infrastructure and landscaping improvements (sidewalks, utilities, green spaces, water features, etc.) surround the building and garage. Excavations for the proposed development may range from 2 to 15 feet below existing grades for pile caps, utilities, elevator pits, service pits, and other structures.

Site History

Portions of the property were used for petroleum storage, handling and distribution operations between approximately 1919 and 1994. During historic operations, bulk storage tanks were used to store No. 2 fuel oil on-site. In the 1990's, the property was redeveloped for commercial uses, and the tanks were reportedly removed. The property was occupied by different commercial tenants located in warehouse buildings from 1994 through 2008; the warehouse buildings were demolished in 2009.

Regulatory Status

The site was historically used for industrial and commercial purposes, which resulted in soil and groundwater impacts (primarily petroleum hydrocarbons and related constituents), that have been previously addressed under the Massachusetts Contingency Plan (MCP). Various environmental reports documenting these impacts and subsequent remedial actions have been submitted to the Massachusetts DEP by others and are available to the public. Applicable MCP Reportable Concentrations pursuant to the MCP 310 CMR 40.0000 for this site are RCS-1 for soil and RCGW-2 for groundwater (as site groundwater would not be considered to be, nor proximal to, a current or potential drinking water supply).

MCP response actions were undertaken from 1987 to 2009. Various MassDEP Release Tracking Numbers (RTNs) have been assigned to the site because these reporting conditions were identified in different parts of the site. The RTNs have been closed individually and/or linked to RTN 3-11886, which is the latest and main RTN for the site.

The Disposal Site under RTN 3-11886 achieved regulatory closure via a Class A3 Response Action Outcome, which was submitted to the MassDEP in October 2009, indicating that a Permanent Solution has been achieved, contamination has not been reduced to background and an Activity and Use Limitation (AUL) had been implemented.

Temporary Construction Dewatering Notice of Intent

In support of the NOI, Haley & Aldrich collected a composite water sample from two (2) observation wells: HA14-PB10S and HA14-PB13S, which are located as shown on Figure 2. The location of observation well HA14-PB13S is located within the former RTN 3-11886, associated with the previous response actions. Observation well HA14-PB10S is located near the existing train tracks. These samples were submitted in July 2014 to Alpha Analytical Laboratory of Westborough, Massachusetts for analysis for NPDES RGP permit parameters including VOCs, SVOCs, PAHs, total metals, TPH, pesticides, PCBs, Total Suspended Solids (TSS), chloride, total cyanide, total phenolics and total residual chlorine. The analytical results for the July 2014 groundwater sample identified concentrations below applicable NPDES RGP Effluent Limits with the exception of total iron, total arsenic, and chlorine which slightly exceeded the effluent limits. The results of water quality testing conducted for this NOI are summarized in Table I.

Dewatering is generally planned to be conducted from sumps or temporary dewatering wells located within the excavation limits. Dewatering is necessary to control groundwater, seepage, precipitation, surface water runoff and construction-generated water to enable construction in-the-dry. Construction dewatering is currently anticipated to begin in September 2014 and possibly extend until September 2016.

As part of the dewatering, an effluent treatment system will be designed by the Contractor to meet NPDES RGP discharge criteria. Prior to discharge, collected water will be routed through a sedimentation tank with an oil/water separator component and bag filters, at a minimum, to remove suspended solids and undissolved chemical constituents. Supplemental effluent treatment may be

required to meet discharge criteria as shown in the Proposed Treatment System Schematic included in Figure 4.

Discharge of construction dewatering effluent under this RGP NOI will be to an existing 72-in. outfall into the Mystic River; see Figure 3.

Dilution Factor Application for Metals

As noted previously, results from analytical testing on the water sample collected at the site indicate concentrations of total iron that exceed RGP discharge limits. Accordingly, a Dilution Factor (DF) was calculated for the detected levels of total iron greater than the applicable RGP Effluent Limits. The calculated DF was used to find the appropriate Dilution Range concentrations for iron. The DF was calculated using the following equation:

$$DF = (Q_d + Q_s)/Q_d$$

where Q_d is the maximum discharge flow rate, estimated to be 100 gallons per minute (GPM) or approximately 0.223 cubic feet per second (cfs), and Q_s is the receiving water flow rate, minimum for 7 consecutive days with a recurrence interval of 10 years. Q_s is estimated to be 18.37 based on a 7Q10 value of 0.293 cfs per square mile and a drainage area of 62.7 square miles at the Amelia Earhart Dam/USGS gauging station number 01103050. Using these values, the DF is equal to 83.4.

If testing of the dewatering effluent indicates concentrations greater than the Appendix IV limits, supplemental effluent treatment will be implemented. According to Appendix IV of the Remediation General Permit, the total recoverable metals limitation for the calculated dilution factor is 5,000 μg/L for iron and 500 for arsenic. The iron limitation is above the concentration detected in the sample from observation well HA14-PB13S and below the concentration in observation well HA14-PB10S. For arsenic, the limitation in Appendix IV is above the 3.92 and 14.88 μg /l detected in the water samples from the wells.

Appendices

The completed "Suggested Notice of Intent" (NOI) form as provided in the RGP is enclosed in Appendix A. The site operator is Suffolk Construction and will engage a subcontractor to conduct the Site work, including the dewatering activities. An Owner's Representative will monitor the Contractor's dewatering activities on behalf of the project owner. In accordance with the requirements for this NOI submission, Partners HealthCare System as the project owner and Suffolk Construction as the site operator are listed as co-permittees for this NPDES RGP, and therefore both have signed the NOI form.

Closing

Thank you very much for your consideration of this NOI. Please feel free to contact us should you wish to discuss the information contained herein or if you need additional information.

Sincerely yours,
HALEY & ALDRICH, INC

Casey E. Bartlett
Staff Engineer

Iliana Alvarado
Senior Project Manager

Attachments:

Table I	Summary of Groundwater Quality Data
Figure 1	Project Locus
Figure 2	Site and Subsurface Exploration Location Plan
Figure 3	Drainage Discharge Plan
Figure 4	Proposed Treatment System Schematic
Appendix A	Suggested Notice of Intent (NOI) form for Remediation General Permit
Appendix B	Best Management Practices Plan (BMPP)
Appendix C	Endangered Species Act Documentation
Appendix D	National Register of Historic Places and Massachusetts Historical Commission Documentation
Appendix E	Laboratory Data Reports for Groundwater Sampling/Testing

c: MADEP; Attn: Division of Watershed Management, Rober Kubit
Partners HealthCare System; Attn: David Burson
Suffolk Construction Company; Attn: Zach Hammond, Richard Pielli

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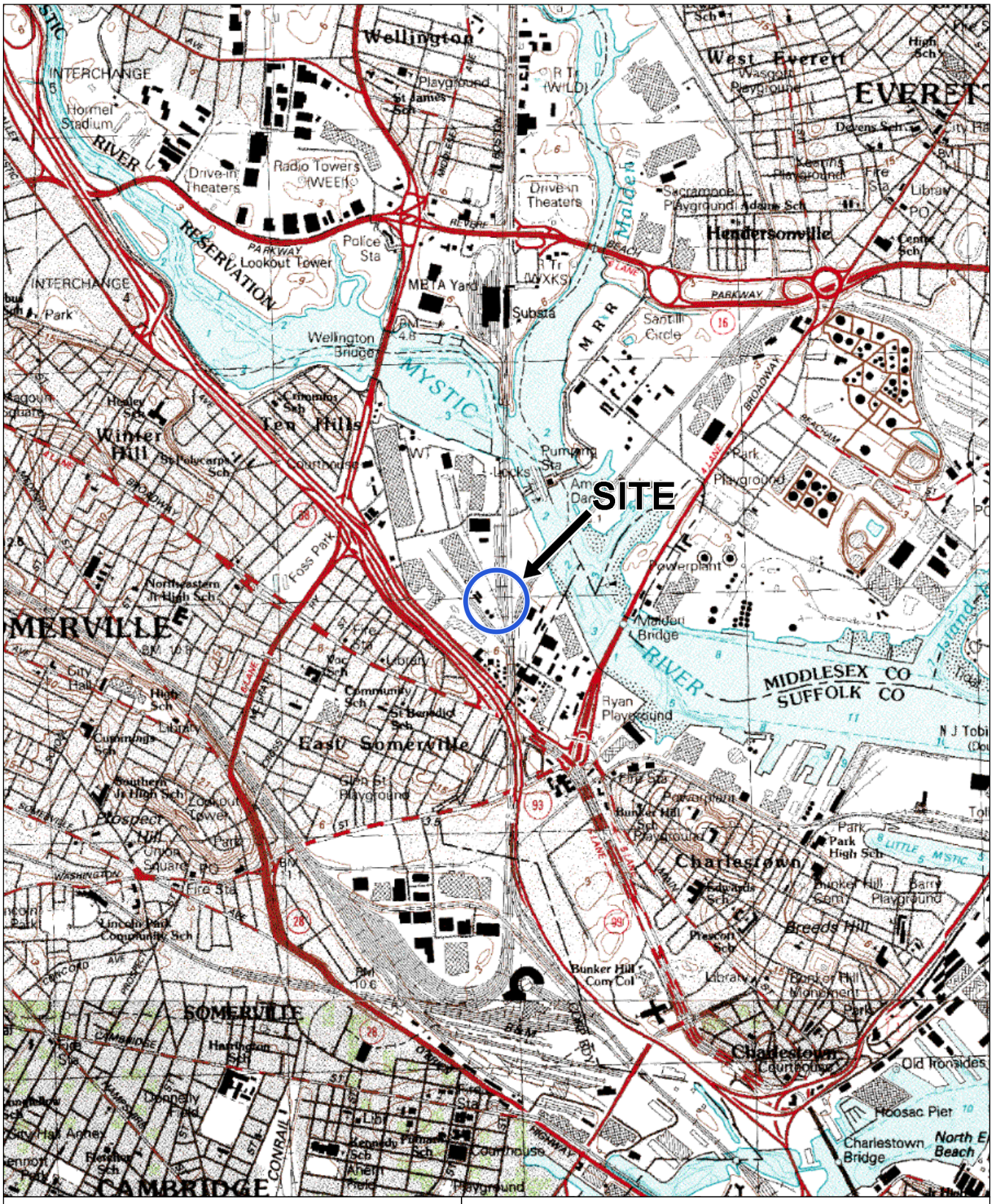
TABLE I
SUMMARY OF WATER QUALITY DATA
PROPOSED PARTNERS HEALTHCARE ADMINISTRATIVE CAMPUS
SOMERVILLE, MASSACHUSETSS
FILE NO. 40798-015

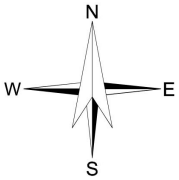
LOCATION			**HA14-PB10S (OW)**		**HA14-PB13S (OW)**	
SAMPLING DATE	**Category III**		**7/10/2014**	**7/15/2014**	**7/10/2014**	**7/15/2014**
LAB SAMPLE ID	**NPDES RGP**	**Limit type based on sample**	**L1415327-01 L1415327-01 R1 L1416665-01**	**L1415828-01**	**L1415327-02 L1415327-02 R1 L1416665-02**	**L1415828-02**
	Criteria					
Volatile Organics by GC/MS (ug/l)						
Chlorobenzene	NA		40	-	ND(0.25)	-
Tert-Butyl Alcohol	monitor only (ug/l)	daily maximum	71 E	-	ND(5)	-
Total VOCs by GC/MS	NA		111	-	ND	
Volatile Organics by GC/MS-SIM (ug/l)						
1,4-Dioxane	monitor only (ug/l)	daily maximum	ND(1.5)	-	ND(1.5)	-
Semivolatile Organics by GC/MS (ug/l)						
Total SVOCs GC/MS	NA		ND	-	ND	
Semivolatile Organics by GC/MS-SIM (ug/l)						
1-Methylnaphthalene	NA		1.1	-	ND(0.1)	-
Acenaphthene	Total PAHs 100 ug/l	daily maximum	1	-	ND(0.1)	-
Anthracene	Total PAHs 100 ug/l	daily maximum	0.29	-	ND(0.1)	-
Fluorene	Total PAHs 100 ug/l	daily maximum	0.48	-	ND(0.1)	-
Total SVOCs GC/MS-SIM	NA		2.87	-	ND	
Total metals (ug/l)						
Antimony, Total	5.6 ug/l	daily maximum	ND(1)	-	ND(1)	-
Arsenic, Total	10 ug/l	monthly average	3.92	-	**14.88**	-
Cadmium, Total	0.2 ug/l	monthly average	ND(0.1)	-	ND(0.1)	-
Chromium, Total	60.2 ug/l	monthly average	ND(0.5)	-	ND(0.5)	-
Chromium, Hexavalent	11.4 ug/l	monthly average	ND(5)	-	ND(5)	-
Copper, Total	5.2 ug/l	monthly average	ND(0.5)	-	1.4	-
Iron, Total	1000 ug/l	daily maximum	**9500**	**-**	**2000**	-
Lead, Total	1.3 ug/l	monthly average	ND(0.25)	-	0.59	-
Mercury, Total	0.9 ug/l	monthly average	ND(0.1)	-	ND(0.1)	-
Nickel, Total	29 ug/l	monthly average	1.48	-	24.45	-
Selenium, Total	5 ug/l	monthly average	ND(2.5)	-	ND(2.5)	-
Silver, Total	1.2 ug/l	daily maximum	ND(0.2)	-	ND(0.2)	-
Zinc, Total	66.6 ug/l	monthly average	14.35	-	27.46	-
Dissolved Metals (ug/l)						
Iron, Dissolved	NA	NA	9600		1600	
TPH (mg/l)	5 mg/l	daily maximum	-	ND(2)	-	ND(2)
PCBs (ug/l)						
Total PCBs	0.000064 ug/l	daily maximum	ND	-	ND	-
Microextractables by GC (ug/l)						
1,2-Dibromoethane	0.05 ug/l	daily maximum	ND(0.005)	-	ND(0.005)	-
General Chemistry (ug/l)						
Chloride	monitor only	daily maximum	229000	-	36500	-
Chlorine, Total Residual	11 ug/l	monthly average	ND(10)	-	**2600**	-
Cyanide, Amenable	5.2 ug/l	monthly average	ND(5)	-	ND(5)	-
Cyanide, Physiologically Available	5.2 ug/l	monthly average	ND(2.5)	-	ND(2.5)	-
Cyanide, Total	5.2 ug/l	monthly average	ND(2.5)	-	ND(2.5)	-
Phenolics, Total	300 ug/l	daily maximum	ND(15)	-	ND(15)	-
Solids, Total Suspended	l, or 50 mg/l for hydrostatic	monthly average	14000	-	6100	-

ABBREVIATIONS:
NA: Not applicable.
ND(0.25): Not detected; number in parenthesis is one-half the laboratory detection limit.
E: estimated
PAHs: Polycyclic Aromatic Hydrocarbons
VOCs: Volatile Organic Compounds
SVOCs: Semi-Volatile Organic Compounds
PCBs: Polycyclic Biphenyls

NOTES:
1. This table includes only those compunds detected on the dates indicated.
2. **Bold** values indicate values that exceed the NPDES criteria.
3. Category III NPDES RGP, or "Contaminated Construction Dewatering," was chosen.



SITE COORDINATES: 42°23'25"N,71°4'41"W



U.S.G.S. QUADRANGLE: BOSTON NORTH, MA

HALEY & ALDRICH

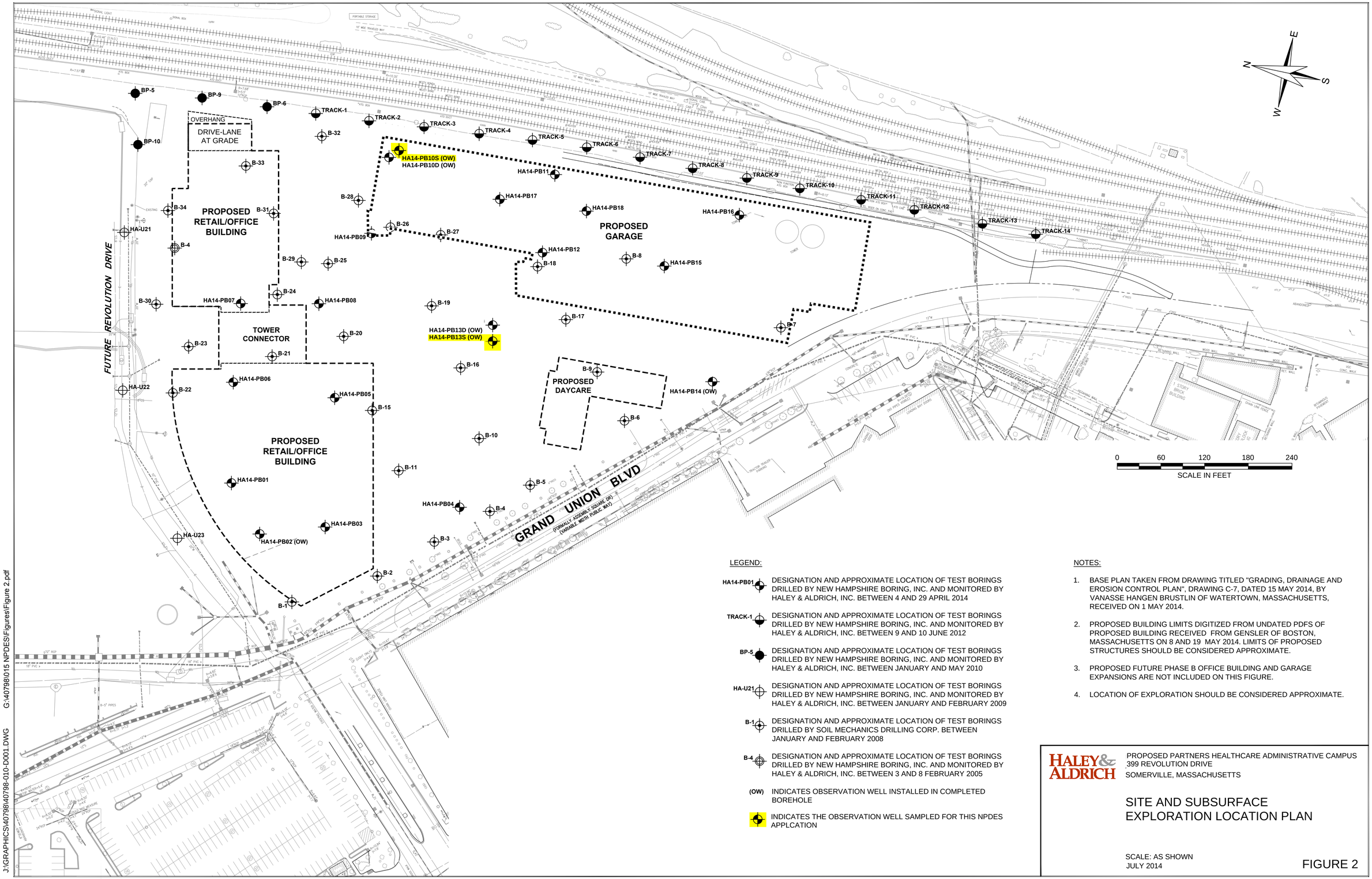
PARTNERS HEALTHCARE ADMINISTRATIVE CAMPUS
399 REVOLUTION DRIVE
SOMERVILLE, MASSACHUSETTS

PROJECT LOCUS

SCALE: 1:24,000
JULY 2014

FIGURE 1

40798-010 1.PDF



LEGEND:

HA14-PB01	DESIGNATION AND APPROXIMATE LOCATION OF TEST BORINGS DRILLED BY NEW HAMPSHIRE BORING, INC. AND MONITORED BY HALEY & ALDRICH, INC. BETWEEN 4 AND 29 APRIL 2014
TRACK-1	DESIGNATION AND APPROXIMATE LOCATION OF TEST BORINGS DRILLED BY NEW HAMPSHIRE BORING, INC. AND MONITORED BY HALEY & ALDRICH, INC. BETWEEN 9 AND 10 JUNE 2012
BP-5	DESIGNATION AND APPROXIMATE LOCATION OF TEST BORINGS DRILLED BY NEW HAMPSHIRE BORING, INC. AND MONITORED BY HALEY & ALDRICH, INC. BETWEEN JANUARY AND MAY 2010
HA-U21	DESIGNATION AND APPROXIMATE LOCATION OF TEST BORINGS DRILLED BY NEW HAMPSHIRE BORING, INC. AND MONITORED BY HALEY & ALDRICH, INC. BETWEEN JANUARY AND FEBRUARY 2009
B-1	DESIGNATION AND APPROXIMATE LOCATION OF TEST BORINGS DRILLED BY SOIL MECHANICS DRILLING CORP. BETWEEN JANUARY AND FEBRUARY 2008
B-4	DESIGNATION AND APPROXIMATE LOCATION OF TEST BORINGS DRILLED BY NEW HAMPSHIRE BORING, INC. AND MONITORED BY HALEY & ALDRICH, INC. BETWEEN 3 AND 8 FEBRUARY 2005
(OW)	INDICATES OBSERVATION WELL INSTALLED IN COMPLETED BOREHOLE
	INDICATES THE OBSERVATION WELL SAMPLED FOR THIS NPDES APPLCATION

NOTES:

1. BASE PLAN TAKEN FROM DRAWING TITLED "GRADING, DRAINAGE AND EROSION CONTROL PLAN", DRAWING C-7, DATED 15 MAY 2014, BY VANASSE HANGEN BRUSTLIN OF WATERTOWN, MASSACHUSETTS, RECEIVED ON 1 MAY 2014.
2. PROPOSED BUILDING LIMITS DIGITIZED FROM UNDATED PDFS OF PROPOSED BUILDING RECEIVED FROM GENSLER OF BOSTON, MASSACHUSETTS ON 8 AND 19 MAY 2014. LIMITS OF PROPOSED STRUCTURES SHOULD BE CONSIDERED APPROXIMATE.
3. PROPOSED FUTURE PHASE B OFFICE BUILDING AND GARAGE EXPANSIONS ARE NOT INCLUDED ON THIS FIGURE.
4. LOCATION OF EXPLORATION SHOULD BE CONSIDERED APPROXIMATE.

HALEY & ALDRICH

PROPOSED PARTNERS HEALTHCARE ADMINISTRATIVE CAMPUS
399 REVOLUTION DRIVE
SOMERVILLE, MASSACHUSETTS

SITE AND SUBSURFACE EXPLORATION LOCATION PLAN

SCALE: AS SHOWN
JULY 2014

FIGURE 2

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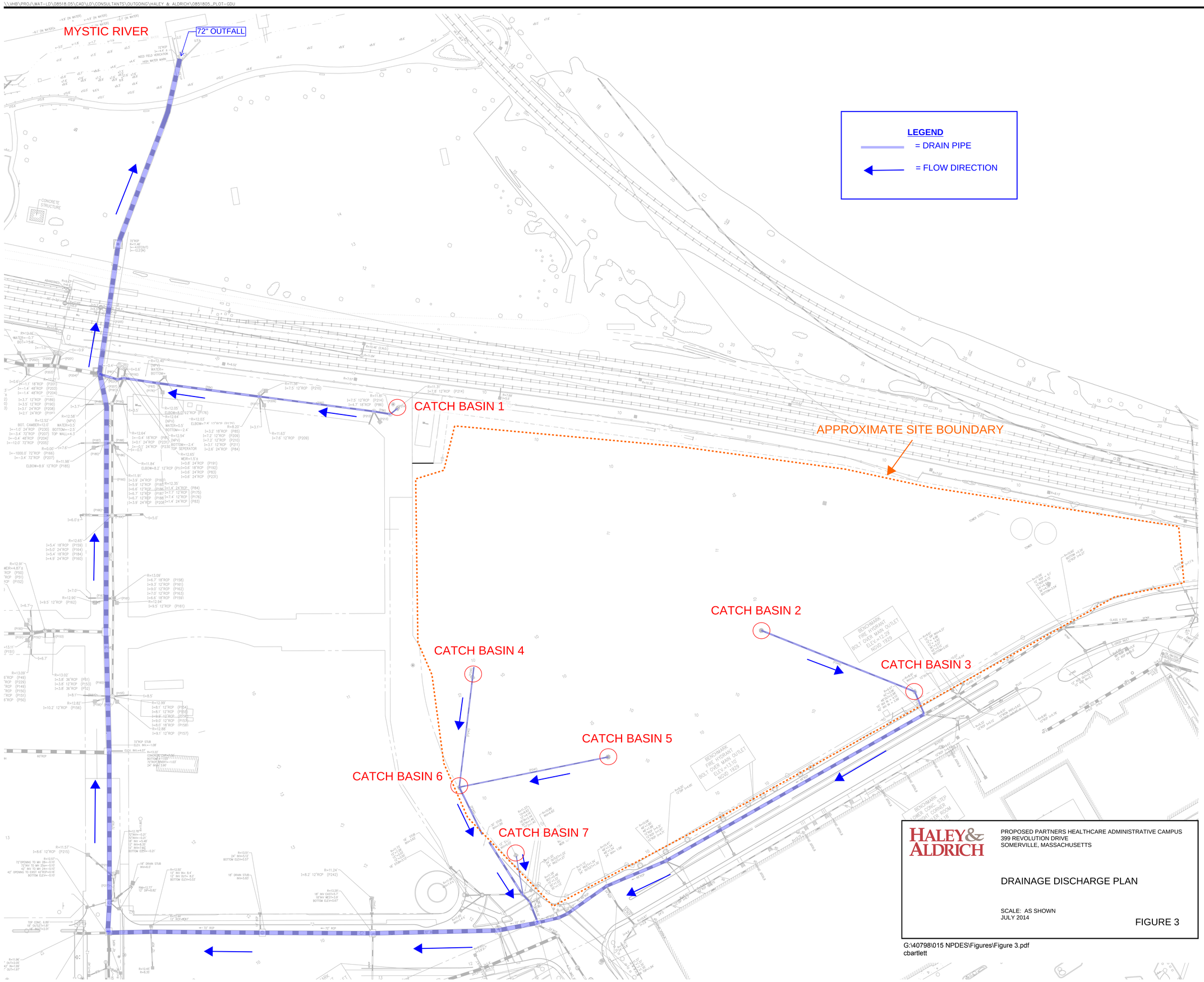

VHB
Vanasse Hangen Brustlin, Inc.
Transportation
Land Development
Environmental Services
101 Walnut Street, P.O. Box 9151
Watertown, Massachusetts 02471
617.924.1770 • FAX 617.924.2286

No.	Revision	Date	Appvd.

Designed by | Drawn by TAH | Checked by RPM
CAD checked by | Approved by HGH
Scale 1"=50' | Date July 17, 2014
Project Title

Grand Union Boulevard
Somerville, Massachusetts
Issued for

Not Approved for Construction
Drawing Title

Drainage Exhibit

Drawing Number
D-1
Sheet of
1 1
Project Number
08518.05

HALEY & ALDRICH

PROPOSED PARTNERS HEALTHCARE ADMINISTRATIVE CAMPUS
399 REVOLUTION DRIVE
SOMERVILLE, MASSACHUSETTS

DRAINAGE DISCHARGE PLAN

SCALE: AS SHOWN
JULY 2014

FIGURE 3

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cbartlett

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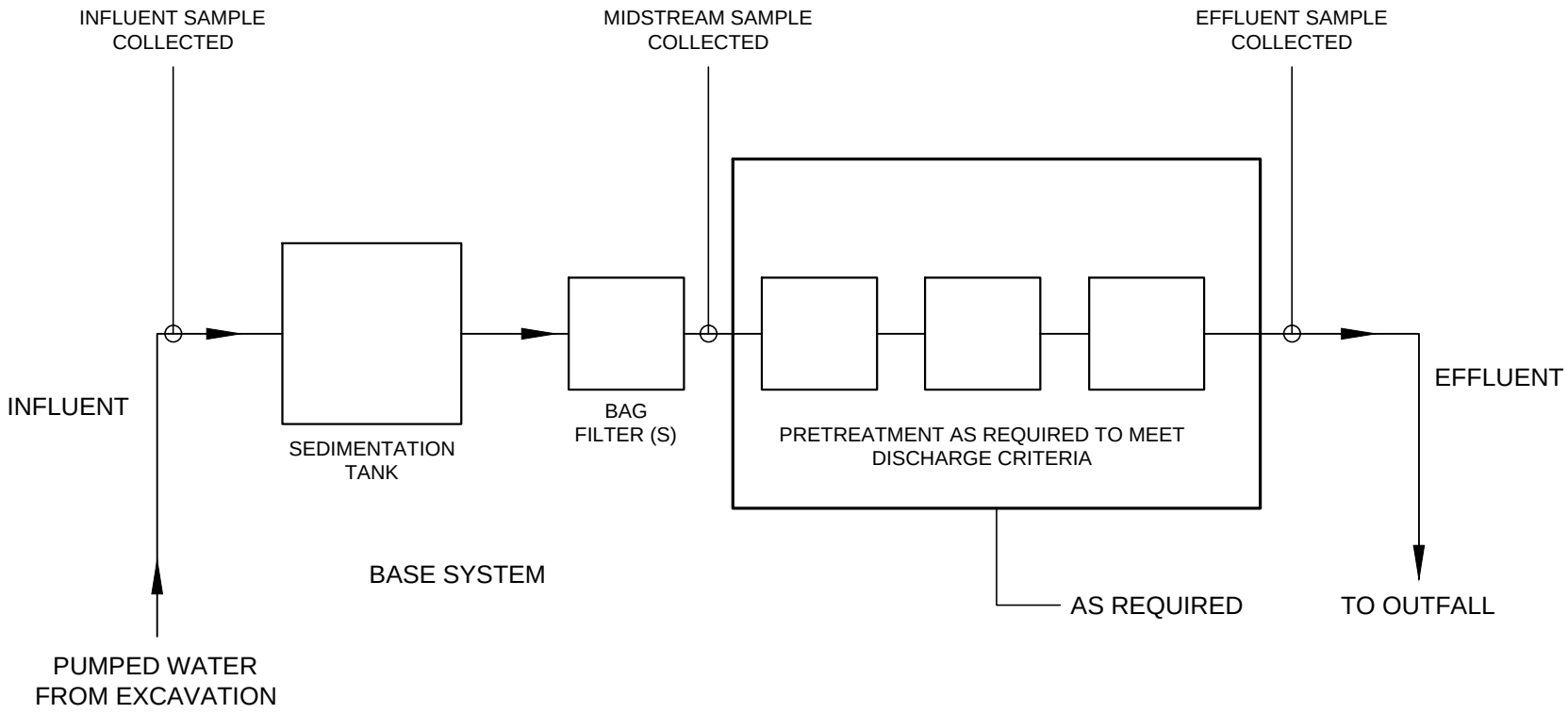

LEGEND:

→ DIRECTION OF FLOW

NOTE:

1. DETAILS OF TREATMENT SYSTEM MAY VARY FROM SYSTEM INDICATED ABOVE. SPECIFIC MEANS AND METHODS OF TREATMENT TO BE SELECTED BY CONTRACTOR. WATER WILL BE TREATED TO MEET REQUIRED EFFLUENT STANDARDS.

HALEY & ALDRICH

PROPOSED PARTNERS HEALTHCARE ADMINISTRATIVE CAMPUS
399 REVOLUTION DRIVE
SOMERVILLE, MASSACHUSETTS

PROPOSED
TREATMENT SYSTEM
SCHEMATIC

SCALE: NONE
JULY 2014

FIGURE 4

APPENDIX A

SUGGESTED NOTICE OF INTENT (NOI) FORM FOR REMEDIATION GENERAL PERMIT

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**: Proposed Partners HealthCare Administrative Campus		**Facility/site** mailing address:			
Location of **facility/site**: longitude: -71.078040 latitude: 42.390628	Facility SIC code(s): 8999	Street: 399 Revolution Drive			
b) Name of **facility/site owner:**		Town: Somerville			
Email address of facility/site owner: DBurson@Partners.org		State: MA	Zip: 02145	County: Middlesex	
Telephone no. of facility/site **owner**: 617-726-8449					
Fax no. of facility/site **owner**: 617-724-2740		**Owner** is (check one): 1. Federal ○ 2. State/Tribal ○ 3. Private ◉ 4. Other ○ if so, describe:			
Address of **owner** (if different from site):					
Street: 101 Merrimac Street					
Town: Boston	State: MA	Zip: 02114	County: Suffolk		
c) Legal name of **operator**: Suffolk Construction Company	**Operator** telephone no: 617-517-4415				
	Operator fax no.: 617-236-6590	**Operator** email: JGrossmann@suffolk.com			
Operator contact name and title: Jim Grossmann					
Address of **operator** (if different from owner):	Street: 65 Allerton Street				
Town: Boston	State: MA	Zip: 02119	County: Suffolk		

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

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

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

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

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

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

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

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

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

Site is currently vacant. Constructing an Administrative Campus building, parking garage, and a day care center. Need to discharge water while excavating for foundations.

b) Provide the following information about each discharge:

1) Number of discharge points: 7

2) What is the **maximum** and **average flow rate** of discharge (in cubic feet per second, ft^3/s)?
Max. flow 0.223 Is maximum flow a **design value**? Y ○ N ◉
Average flow (include units) 0.111 Is average flow a design value or estimate? estimate

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

pt.1: lat	42.392085	long	-71.077540	pt.2: lat.	42.390807	long.	-71.077930 ;
pt.3: lat	42.390098	long	-71.078166	pt.4: lat.	42.391540	long.	-71.078343 ;
pt.5: lat	42.391196	long	-71.078837	pt.6: lat.	42.391584	long.	-71.079142 ;
pt.7: lat	42.391540	long	-71.079513	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 Aug 15, 2014 end Aug 15, 2016

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 Figures 2, 3, and 4

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	grab	30,2540D	5.0	14000	NA	14000	NA
2. Total Residual Chlorine (TRC)		☐	☒	2	grab	30,4500CL-D	0.02	ND	NA	ND	NA
3. Total Petroleum Hydrocarbons (TPH)		☒	☐	2	grab	74,1664A	4.0	ND	NA	ND	NA
4. Cyanide (CN)	57125	☒	☐	2	grab	30,4500CN-CE	0.005	ND	NA	ND	NA
5. Benzene (B)	71432	☒	☐	2	grab	1,8260C	0.5	ND	NA	ND	NA
6. Toluene (T)	108883	☒	☐	2	grab	1,8260C	0.75	ND	NA	ND	NA
7. Ethylbenzene (E)	100414	☒	☐	2	grab	1,8260C	0.5	ND	NA	ND	NA
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐	2	grab	1,8260C	1	ND	NA	ND	NA
9. Total BTEX [2]	n/a	☒	☐	2	grab	1,8260C	2.75	ND	NA	ND	NA
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) [3]	106934	☒	☐	2	grab	14,504.1	2	ND	NA	ND	NA
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐	2	grab	1,8260C	1	ND	NA	ND	NA
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☐	☒	2	grab	1,8260C	10	71 Estimated	NA	71 Estimated	NA

* 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	☒	☐	2	grab	1,8260C	2	ND	NA	ND	NA
14. Naphthalene	91203	☒	☐	2	grab	1,8260C	2.5	ND	NA	ND	NA
15. Carbon Tetrachloride	56235	☒	☐	2	grab	1,8260C	0.5	ND	NA	ND	NA
16. 1,2 Dichlorobenzene (o-DCB)	95501	☒	☐	2	grab	1,8260C	2.5	ND	NA	ND	NA
17. 1,3 Dichlorobenzene (m-DCB)	541731	☒	☐	2	grab	1,8260C	2.5	ND	NA	ND	NA
18. 1,4 Dichlorobenzene (p-DCB)	106467	☒	☐	2	grab	1,8260C	2.5	ND	NA	ND	NA
18a. Total dichlorobenzene		☒	☐	2	grab	1,8260C	2.5	ND	NA	ND	NA
19. 1,1 Dichloroethane (DCA)	75343	☒	☐	2	grab	1,8260C	0.75	ND	NA	ND	NA
20. 1,2 Dichloroethane (DCA)	107062	☒	☐	2	grab	1,8260C	0.5	ND	NA	ND	NA
21. 1,1 Dichloroethene (DCE)	75354	☒	☐	2	grab	1,8260C	0.5	ND	NA	ND	NA
22. cis-1,2 Dichloroethene (DCE)	156592	☒	☐	2	grab	1,8260C	0.5	ND	NA	ND	NA
23. Methylene Chloride	75092	☒	☐	2	grab	1,8260C	3	ND	NA	ND	NA
24. Tetrachloroethene (PCE)	127184	☒	☐	2	grab	1,8260C	0.5	ND	NA	ND	NA
25. 1,1,1 Trichloro-ethane (TCA)	71556	☒	☐	2	grab	1,8260C	0.5	ND	NA	ND	NA
26. 1,1,2 Trichloro-ethane (TCA)	79005	☒	☐	2	grab	1,8260C	0.75	ND	NA	ND	NA
27. Trichloroethene (TCE)	79016	☒	☐	2	grab	1,8260C	0.5	ND	NA	ND	NA

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	☒	☐	2	grab	1,8260C	1	ND	NA	ND	NA
29. Acetone	67641	☒	☐	2	grab	1,8260C	5	ND	NA	ND	NA
30. 1,4 Dioxane	123911	☒	☐	2	grab	1,8260C-SIM	3	ND	NA	ND	NA
31. Total Phenols	108952	☒	☐	2	grab	1,8270D	5	ND	NA	ND	NA
32. Pentachlorophenol (PCP)	87865	☒	☐	2	grab	1,8270D	0.8	ND	NA	ND	NA
33. Total Phthalates (Phthalate esters) [4]		☒	☐	2	grab	1,8270D	5	ND	NA	ND	NA
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☒	☐	2	grab	1,8270D	3	ND	NA	ND	NA
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	2	grab	1,8270D	5	ND	NA	ND	NA
a. Benzo(a) Anthracene	56553	☒	☐	2	grab	1,8270D-SIM	0.2	ND	NA	ND	NA
b. Benzo(a) Pyrene	50328	☒	☐	2	grab	1,8270D-SIM	0.2	ND	NA	ND	NA
c. Benzo(b)Fluoranthene	205992	☒	☐	2	grab	1,8270D-SIM	0.2	ND	NA	ND	NA
d. Benzo(k)Fluoranthene	207089	☒	☐	2	grab	1,8270D-SIM	0.2	ND	NA	ND	NA
e. Chrysene	21801	☒	☐	2	grab	1,8270D-SIM	0.2	ND	NA	ND	NA
f. Dibenzo(a,h)anthracene	53703	☒	☐	2	grab	1,8270D-SIM	0.2	ND	NA	ND	NA
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐	2	grab	1,8270D-SIM	0.2	ND	NA	ND	NA
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☐	☒	2	grab	1,8270D-SIM	0.2	1.77	NA	1.77	NA

[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	☐	☒	2	grab	1,8270D-SIM	0.2	1	NA	0.5	NA
i. Acenaphthylene	208968	☒	☐	2	grab	1,8270D-SIM	0.2	ND	NA	ND	NA
j. Anthracene	120127	☐	☒	2	grab	1,8270D-SIM	0.2	0.29	NA	0.145	NA
k. Benzo(ghi) Perylene	191242	☒	☐	2	grab	1,8270D-SIM	0.2	ND	NA	ND	NA
l. Fluoranthene	206440	☒	☐	2	grab	1,8270D-SIM	0.2	ND	NA	ND	NA
m. Fluorene	86737	☐	☒	2	grab	1,8270D-SIM	0.2	0.48	NA	0.24	NA
n. Naphthalene	91203	☒	☐	2	grab	1,8270D-SIM	0.2	ND	NA	ND	NA
o. Phenanthrene	85018	☒	☐	2	grab	1,8270D-SIM	0.2	ND	NA	ND	NA
p. Pyrene	129000	☒	☐	2	grab	1,8270D-SIM	0.2	ND	NA	ND	NA
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐	2	grab	5,608	0.25	ND	NA	ND	NA
38. Chloride	16887006	☐	☒	2	grab	44,300.0	5	229	NA	132.75	NA
39. Antimony	7440360	☒	☐	2	grab	1,6020A	0.002	ND	NA	ND	NA
40. Arsenic	7440382	☐	☒	2	grab	1,6020A	0.005	14.88	NA	9.4	NA
41. Cadmium	7440439	☒	☐	2	grab	1,6020A	0.0002	ND	NA	ND	NA
42. Chromium III (trivalent)	16065831	☒	☐	2	grab	1,6020A	0.001	ND	NA	ND	NA
43. Chromium VI (hexavalent)	18540299	☒	☐	2	grab	1,6020A	0.001	ND	NA	ND	NA
44. Copper	7440508	☒	☐	2	grab	1,6020A	0.001	ND	NA	ND	NA
45. Lead	7439921	☐	☒	2	grab	1,6020A	0.0005	0.59	NA	0.295	NA
46. Mercury	7439976	☒	☐	2	grab	3,245.1	0.0002	ND	NA	ND	NA
47. Nickel	7440020	☒	☐	2	grab	1,6020A	0.0005	24.45	NA	12.965	NA
48. Selenium	7782492	☒	☐	2	grab	1,6020A	0.005	ND	NA	ND	NA
49. Silver	7440224	☒	☐	2	grab	1,6020A	0.0004	ND	NA	ND	NA
50. Zinc	7440666	☒	☐	2	grab	1,6020A	0.01	27.46	NA	20.905	NA
51. Iron	7439896	☒	☐	2	grab	19,200.7	0.05	9500	NA	2000	NA
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: 5 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:

Refer to figure 4

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):	ion exchange if needed		

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 50 gpm Maximum flow rate of treatment system 100 gpm
Design flow rate of treatment system 100 gpm

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

None

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

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

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:
72-inch outfall into the Mystic River, See Figure 3

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 SB(CSO)

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

f) Is the receiving water a listed 303(d) water quality impaired or limited water? Y ⊙ N ○ If yes, for which pollutant(s)?
Ammonia, Dissolved Oxygen, Fecal Coliform, Foam/flocs/Scum/Oil slicks, PCBs, TPH, TSS
Is there a final TMDL? Y ○ N ⊙ If yes, for which pollutant(s)? _____

6. ESA and NHPA Eligibility.

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

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

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

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

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

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

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

1 ___ 2 ___ 3 ___

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

7. Supplemental information.

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

See Table I and Figures 1-4

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:	PROPOSED PARTNERS HEALTHCARE ADMINISTRATIVE CAMPUS
Owner ~~Operator~~ signature:	David S Burson
Printed Name &Title:	DAVID S. BURSON, SENIOR PROJECT MANAGER, PARTNERS HEALTHCARE
Date:	AUGUST 21, 2014

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:	Partners Administrative Consolidation Space
Operator signature:	
Printed Name &Title:	Jim Grossmann VP Operation
Date:	August 20, 2014

APPENDIX B

BEST MANAGEMENT PRACTICIES PLAN (BMPP)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
REMEDIATION GENERAL PERMIT
PROPOSED PARTNERS HEALTHCARE ADMINISTRATIVE CAMPUS
399 REVOLUTION DRIVE
SOMERVILLE, MASSACHUSETTS

Best Management Practices Plan

A Notice of Intent for a Remediation General Permit (RGP) under the National Pollutant Discharge Elimination System (NPDES) has been submitted to the US Environmental Protection Agency (EPA) in anticipation of temporary construction dewatering planned to occur at the Proposed Partners HealthCare Administrative Campus project site located at the corner of Revolution Drive (planned) and Assembly Square Drive in Somerville, Massachusetts. This Best Management Practices Plan (BMPP) has been prepared as an Appendix to the RGP and will be posted at the site during the time period that temporary construction dewatering is occurring at the site.

Water Treatment and Management

Construction dewatering will be conducted from sumps located in excavations for below grade structures and utilities. The treatment system will be designed by the contractor. Prior to discharge, collected water will likely be routed through sedimentation tank(s) and bag filters to remove suspended solids and undissolved chemical constituents, as shown in the Proposed Treatment System Schematic included in Figure 3. Supplemental pretreatment may be required to meet discharge criteria and if necessary, may include ion exchange. Discharge of construction dewatering effluent under this RGP NOI will be to one of the seven (7) existing storm drains near the Site; see Figure 4. All drains discharge into the 72-inch outfall into the Mystic River as indicated on Figure 4.

Discharge Monitoring and Compliance

Regular sampling and testing will be conducted at the influent to the system and the treated effluent as required by the RGP. This includes chemical testing required within the first month of discharging, and the monthly testing to be conducted through the end of the scheduled discharge.

Monitoring will include checking the condition of the treatment system, assessing the need for treatment system adjustments based on monitoring data, observing and recording daily flow rates and discharge quantities, and verifying the flow path of the discharged effluent.

The total monthly flow will be monitored by checking and documenting the flow through the flow meter to be installed on the system. Flow will be maintained below the “system design flow” by regularly monitoring flow and adjusting the amount of construction dewatering as needed.

Monthly monitoring reports will be compiled and maintained at the site.

System Maintenance

A number of methods will be used to minimize the potential for violations for the term of this permit. Scheduled regular maintenance of the treatment system will be conducted to verify proper operation. Regular maintenance will include checking the condition of the treatment system equipment such as the fractionation tanks, filters, hoses, pumps, and flow meters. Periodic maintenance will include changing

bag filters and/or ion exchange units as required to meet discharge criteria. Equipment will be monitored daily for potential issues or unscheduled maintenance requirements.

Employees who have direct or indirect responsibility for ensuring compliance with the RGP will be trained by the Operator.

Miscellaneous Items

Due to the nature of the excavation, erosion control and the nature of the site and surrounding infrastructure, it is not anticipated that there will be any run off into the site from other sources, as well as no run off from the site.

Site security for the treatment system can be covered within the overall site security plan.

Management of Treatment System Materials

No potential sources of pollutants are anticipated during construction dewatering activities. Dewatering effluent will be pumped directly to the treatment system from the excavation with use of hoses and sumps to minimize handling. The contractor will establish staging areas on the site for any equipment or materials storage which may be possible sources of pollution away from any dewatering activities.

Sediment from the fractionalization tank used in the treatment system will be characterized and disposed of as soil at an appropriate receiving facility in accordance with applicable laws and regulations. If used, Ion Exchange resin will be likely recycled and/or manifested to the appropriate receiving facility. Bag filters, if used, will be placed in drums and manifested for off-site disposal.

APPENDIX C

ENDANGERED SPECIES ACT DOCUMENTATION

MASSACHUSETTS AREAS OF CRITICAL ENVIRONMENTAL CONCERN
November 2010

Total Approximate Acreage: 268,000 acres
Approximate acreage and designation date follow ACEC names below.

Bourne Back River
(1,850 acres, 1989) Bourne

Canoe River Aquifer and Associated Areas (17,200 acres, 1991) Easton, Foxborough, Mansfield, Norton, Sharon, and Taunton

Cedar Swamp
(1,650 acres, 1975) Hopkinton and Westborough

Central Nashua River Valley
(12,900 acres, 1996) Bolton, Harvard, Lancaster, and Leominster

Cranberry Brook Watershed
(1,050 acres, 1983) Braintree and Holbrook

Ellisville Harbor
(600 acres, 1980) Plymouth

Fowl Meadow and Ponkapoag Bog
(8,350 acres, 1992) Boston, Canton, Dedham, Milton, Norwood, Randolph, Sharon, and Westwood

Golden Hills
(500 acres, 1987) Melrose, Saugus, and Wakefield

Great Marsh (originally designated as Parker River/Essex Bay)
(25,500 acres, 1979) Essex, Gloucester, Ipswich, Newbury, and Rowley

Herring River Watershed
(4,450 acres, 1991) Bourne and Plymouth

Hinsdale Flats Watershed
(14,500 acres, 1992) Dalton, Hinsdale, Peru, and Washington

Hockomock Swamp
(16,950 acres, 1990) Bridgewater, Easton, Norton, Raynham, Taunton, and West Bridgewater

Inner Cape Cod Bay
(2,600 acres, 1985) Brewster, Eastham, and Orleans

Kampoosa Bog Drainage Basin
(1,350 acres, 1995) Lee and Stockbridge

Karner Brook Watershed
(7,000 acres, 1992) Egremont and Mount Washington

Miscoe, Warren, and Whitehall Watersheds
(8,700 acres, 2000) Grafton, Hopkinton, and Upton

Neponset River Estuary
(1,300 acres, 1995) Boston, Milton, and Quincy

Petapawag
(25,680 acres, 2002) Ayer, Dunstable, Groton, Pepperell, and Tyngsborough

Pleasant Bay
(9,240 acres, 1987) Brewster, Chatham, Harwich, and Orleans

Pocasset River
(160 acres, 1980) Bourne

Rumney Marshes
(2,800 acres, 1988) Boston, Lynn, Revere, Saugus, and Winthrop

Sandy Neck Barrier Beach System
(9,130 acres, 1978) Barnstable and Sandwich

Schenob Brook Drainage Basin
(13,750 acres, 1990) Mount Washington and Sheffield

Squannassit
(37,420 acres, 2002) Ashby, Ayer, Groton, Harvard, Lancaster, Lunenburg, Pepperell, Shirley, and Townsend

Three Mile River Watershed
(14,280 acres, 2008) Dighton, Norton, Taunton

Upper Housatonic River
(12,280 acres, 2009) Lee, Lenox, Pittsfield, Washington

Waquoit Bay
(2,580 acres, 1979) Falmouth and Mashpee

Weir River
(950 acres, 1986) Cohasset, Hingham, and Hull

Wellfleet Harbor
(12,480 acres, 1989) Eastham, Truro, and Wellfleet

Weymouth Back River
(800 acres, 1982) Hingham and Weymouth

ACEC acreages above are based on MassGIS calculations and may differ from numbers originally presented in designation documents and other ACEC publications due to improvements in accuracy of GIS data and boundary clarifications. Listed acreages have been rounded to the nearest 50 or 10 depending on whether boundary clarification has occurred. For more information please see, http://www.mass.gov/dcr/stewardship/acec/aboutMaps.htm.

Towns with ACECs within their Boundaries November 2010

TOWN	ACEC
Ashby	Squannassit
Ayer	Petapawag
	Squannassit
Barnstable	Sandy Neck Barrier Beach System
Bolton	Central Nashua River Valley
Boston	Rumney Marshes
	Fowl Meadow and Ponkapoag Bog
	Neponset River Estuary
Bourne	Pocasset River
	Bourne Back River
	Herring River Watershed
Braintree	Cranberry Brook Watershed
Brewster	Pleasant Bay
	Inner Cape Cod Bay
Bridgewater	Hockomock Swamp
Canton	Fowl Meadow and Ponkapoag Bog
Chatham	Pleasant Bay
Cohasset	Weir River
Dalton	Hinsdale Flats Watershed
Dedham	Fowl Meadow and Ponkapoag Bog
Dighton	Three Mile River Watershed
Dunstable	Petapawag
Eastham	Inner Cape Cod Bay
	Wellfleet Harbor
Easton	Canoe River Aquifer
	Hockomock Swamp
Egremont	Karner Brook Watershed
Essex	Great Marsh
Falmouth	Waquoit Bay
Foxborough	Canoe River Aquifer
Gloucester	Great Marsh
Grafton	Miscoe-Warren-Whitehall Watersheds
Groton	Petapawag
	Squannassit
Harvard	Central Nashua River Valley
	Squannassit
Harwich	Pleasant Bay
Hingham	Weir River
	Weymouth Back River
Hinsdale	Hinsdale Flats Watershed
Holbrook	Cranberry Brook Watershed
Hopkinton	Miscoe-Warren-Whitehall Watersheds
	Cedar Swamp
Hull	Weir River
Ipswich	Great Marsh
Lancaster	Central Nashua River Valley
	Squannassit
Lee	Kampoosa Bog Drainage Basin
	Upper Housatonic River
Lenox	Upper Housatonic River
Leominster	Central Nashua River Valley
Lunenburg	Squannassit
Lynn	Rumney Marshes
Mansfield	Canoe River Aquifer
Mashpee	Waquoit Bay
Melrose	Golden Hills
Milton	Fowl Meadow and Ponkapoag Bog
	Neponset River Estuary

TOWN	ACEC
Mt. Washington	Karner Brook Watershed
	Schenob Brook
Newbury	Great Marsh
Norton	Hockomock Swamp
	Canoe River Aquifer
	Three Mile River Watershed
Norwood	Fowl Meadow and Ponkapoag Bog
Orleans	Inner Cape Cod Bay
	Pleasant Bay
Pepperell	Petapawag
	Squannassit
Peru	Hinsdale Flats Watershed
Pittsfield	Upper Housatonic River
Plymouth	Herring River Watershed
	Ellisville Harbor
Quincy	Neponset River Estuary
Randolph	Fowl Meadow and Ponkapoag Bog
Raynham	Hockomock Swamp
Revere	Rumney Marshes
Rowley	Great Marsh
Sandwich	Sandy Neck Barrier Beach System
Saugus	Rumney Marshes
	Golden Hills
Sharon	Canoe River Aquifer
	Fowl Meadow and Ponkapoag Bog
Sheffield	Schenob Brook
Shirley	Squannassit
Stockbridge	Kampoosa Bog Drainage Basin
Taunton	Hockomock Swamp
	Canoe River Aquifer
	Three Mile River Watershed
Truro	Wellfleet Harbor
Townsend	Squannassit
Tyngsborough	Petapawag
Upton	Miscoe-Warren-Whitehall Watersheds
Wakefield	Golden Hills
Washington	Hinsdale Flats Watershed
	Upper Housatonic River
Wellfleet	Wellfleet Harbor
W Bridgewater	Hockomock Swamp
Westborough	Cedar Swamp
Westwood	Fowl Meadow and Ponkapoag Bog
Weymouth	Weymouth Back River
Winthrop	Rumney Marshes

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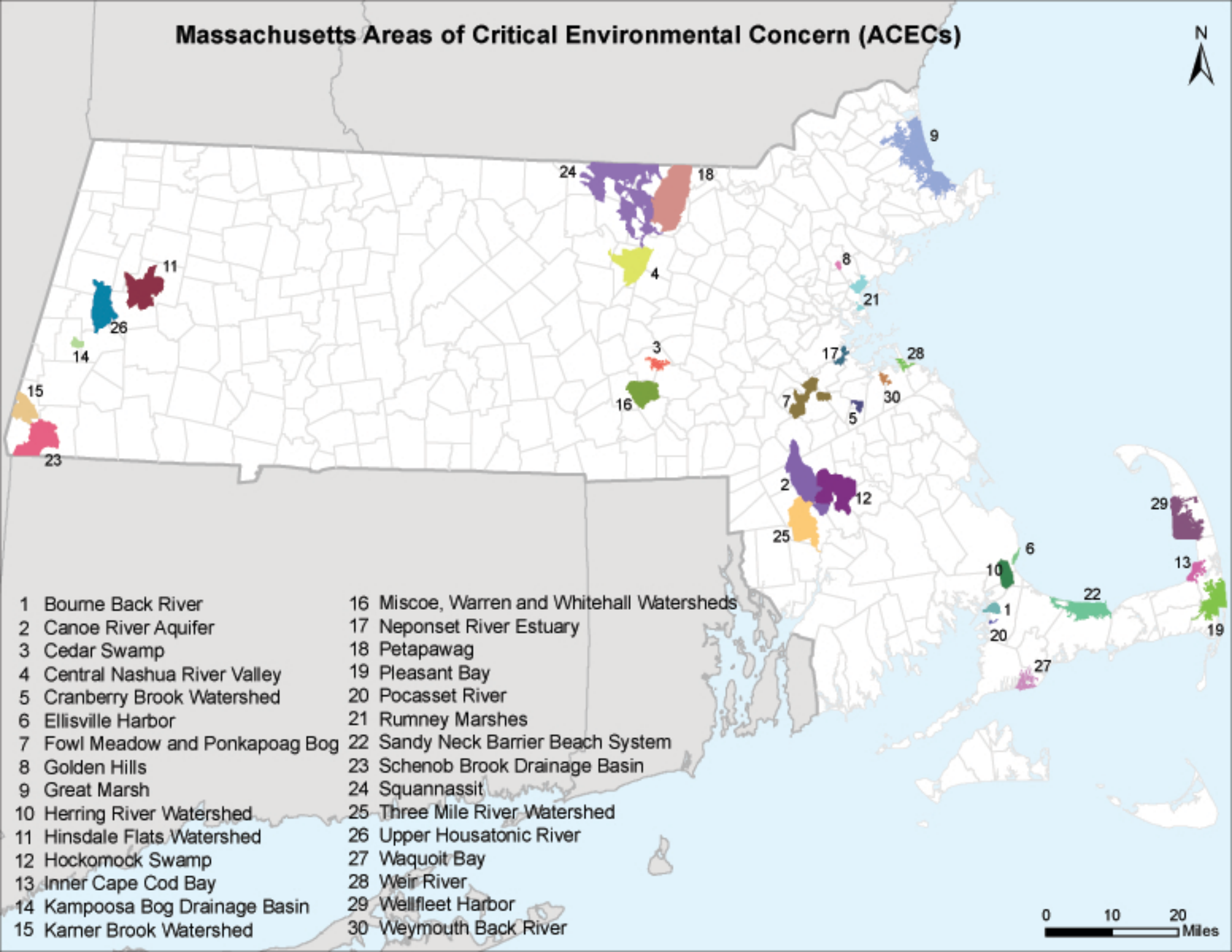
Massachusetts Areas of Critical Environmental Concern (ACECs)



1 Bourne Back River
2 Canoe River Aquifer
3 Cedar Swamp
4 Central Nashua River Valley
5 Cranberry Brook Watershed
6 Ellisville Harbor
7 Fowl Meadow and Ponkapoag Bog
8 Golden Hills
9 Great Marsh
10 Herring River Watershed
11 Hinsdale Flats Watershed
12 Hockomock Swamp
13 Inner Cape Cod Bay
14 Kampoosa Bog Drainage Basin
15 Karner Brook Watershed
16 Miscoe, Warren and Whitehall Watersheds
17 Neponset River Estuary
18 Petapawag
19 Pleasant Bay
20 Pocasset River
21 Rumney Marshes
22 Sandy Neck Barrier Beach System
23 Schenob Brook Drainage Basin
24 Squannassit
25 Three Mile River Watershed
26 Upper Housatonic River
27 Waquoit Bay
28 Weir River
29 Wellfleet Harbor
30 Weymouth Back River

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES IN MASSACHUSETTS

COUNTY	SPECIES	FEDERAL STATUS	GENERAL LOCATION/HABITAT	TOWNS
Barnstable	Piping Plover	Threatened	Coastal Beaches	All Towns
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Chatham
	Sandplain gerardia	Endangered	Open areas with sandy soils.	Sandwich and Falmouth.
	Northern Red-bellied Cooter	Endangered	Inland Ponds and Rivers	Bourne (north of the Cape Cod Canal)
Berkshire	Bog Turtle	Threatened	Wetlands	Egremont and Sheffield
Bristol	Piping Plover	Threatened	Coastal Beaches	Fairhaven, Dartmouth, Westport
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Fairhaven, New Bedford, Dartmouth, Westport
	Northern Red-bellied Cooter	Endangered	Inland Ponds and Rivers	Taunton
Dukes	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Piping Plover	Threatened	Coastal Beaches	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Aquinnah and Chilmark
	Sandplain gerardia	Endangered	Open areas with sandy soils.	West Tisbury
Essex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Gloucester, Essex and Manchester
	Piping Plover	Threatened	Coastal Beaches	Gloucester, Essex, Ipswich, Rowley, Revere, Newbury, Newburyport and Salisbury
Franklin	Northeastern bulrush	Endangered	Wetlands	Montague, Warwick
	Dwarf wedgemussel	Endangered	Mill River	Whately
Hampshire	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Hadley
	Puritan tiger beetle	Threatened	Sandy beaches along the Connecticut River	Northampton and Hadley
	Dwarf wedgemussel	Endangered	Rivers and Streams.	Hatfield, Amherst and Northampton
Hampden	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Southwick
Middlesex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Groton
Nantucket	Piping Plover	Threatened	Coastal Beaches	Nantucket
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Nantucket
	American burying beetle	Endangered	Upland grassy meadows	Nantucket
Plymouth	Piping Plover	Threatened	Coastal Beaches	Scituate, Marshfield, Duxbury, Plymouth, Wareham and Mattapoisett
	Northern Red-bellied Cooter	Endangered	Inland Ponds and Rivers	Kingston, Middleborough, Carver, Plymouth, Bourne, Wareham, Halifax, and Pembroke
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Plymouth, Marion, Wareham, and Mattapoisett.
Suffolk	Piping Plover	Threatened	Coastal Beaches	Winthrop
Worcester	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Leominster

-Eastern cougar and gray wolf are considered extirpated in Massachusetts.
-Endangered gray wolves are not known to be present in Massachusetts, but dispersing individuals from source populations in Canada may occur statewide.
-Critical habitat for the Northern Red-bellied Cooter is present in Plymouth County.

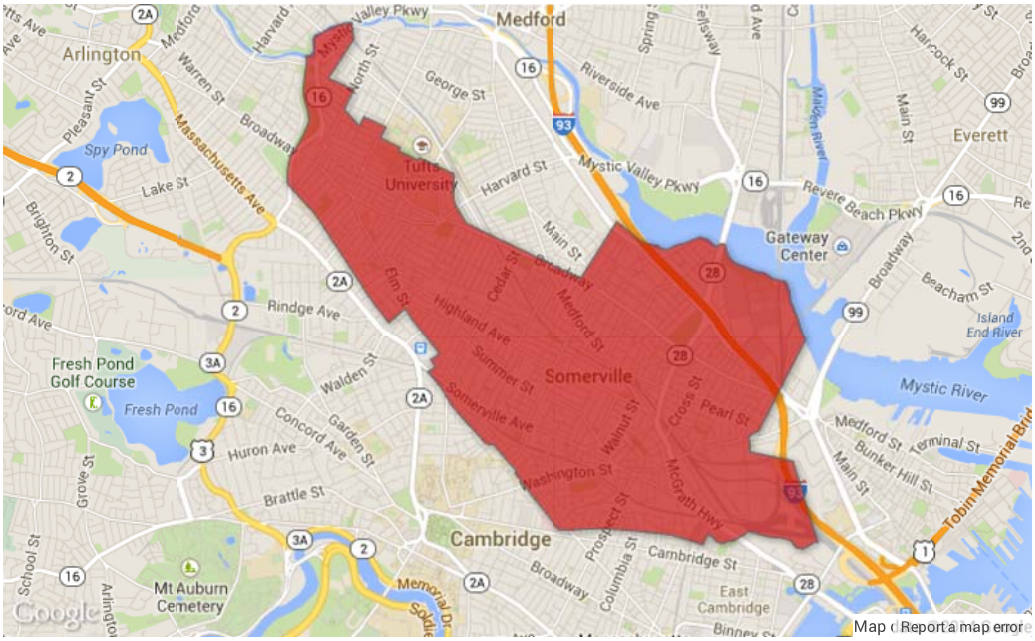
Revised 10/7/2011

Town Species Viewer

The Natural Heritage & Endangered Species Program maintains a list of all documented MESA-listed species observations in the Commonwealth. Please select a town if you would like to see a table showing which listed species have been observed in that town. The selected town will also be highlighted on the map. Alternatively you can specify either the Common Name or Scientific Name of a species to see it's distribution on the map and table showing the towns it has been observed in. Clicking on a column header in the table will sort the column. Clicking again on the same column heading will reverse the sort order.

The Town List and Species Viewer will be updated at regular intervals as new data is accepted and entered into the NHESP database.

Town: SOMERVILLE or Species (Common Name): or Species (Scientific Name):



Showing 1 to 1 of 1 entries

Search:

First Previous 1 Next Last

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Most Recent Obs
SOMERVILLE	Bird	Sterna hirundo	Common Tern	SC	2008

Show 10 entries

Show Additional Info

Download data as xls or csv file.

Natural Heritage & Endangered Species Program
Mass. Division of Fisheries & Wildlife

Questions/Comments to natural.heritage@state.ma.us
Phone: (508) 389-6360

Species and Conservation Resources

- Species Information and Conservation
- NHESP Research and Inventory
- List of Rare Species in Massachusetts
- Report Rare Species
- Request Species Information
- Biodiversity in the Housatonic River Watershed
- Scientific Collection Permit (Education/Research)
- Rare Bird Conservation
- **See All**

Division of Fisheries and Wildlife
100 Hartwell Street, Suite 230
West Boylston MA 01583
Tel: 508-389-6300
mass.wildlife@state.ma.us

Contact ALL DFW Offices

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MassDEP - Bureau of Waste Site Cleanup

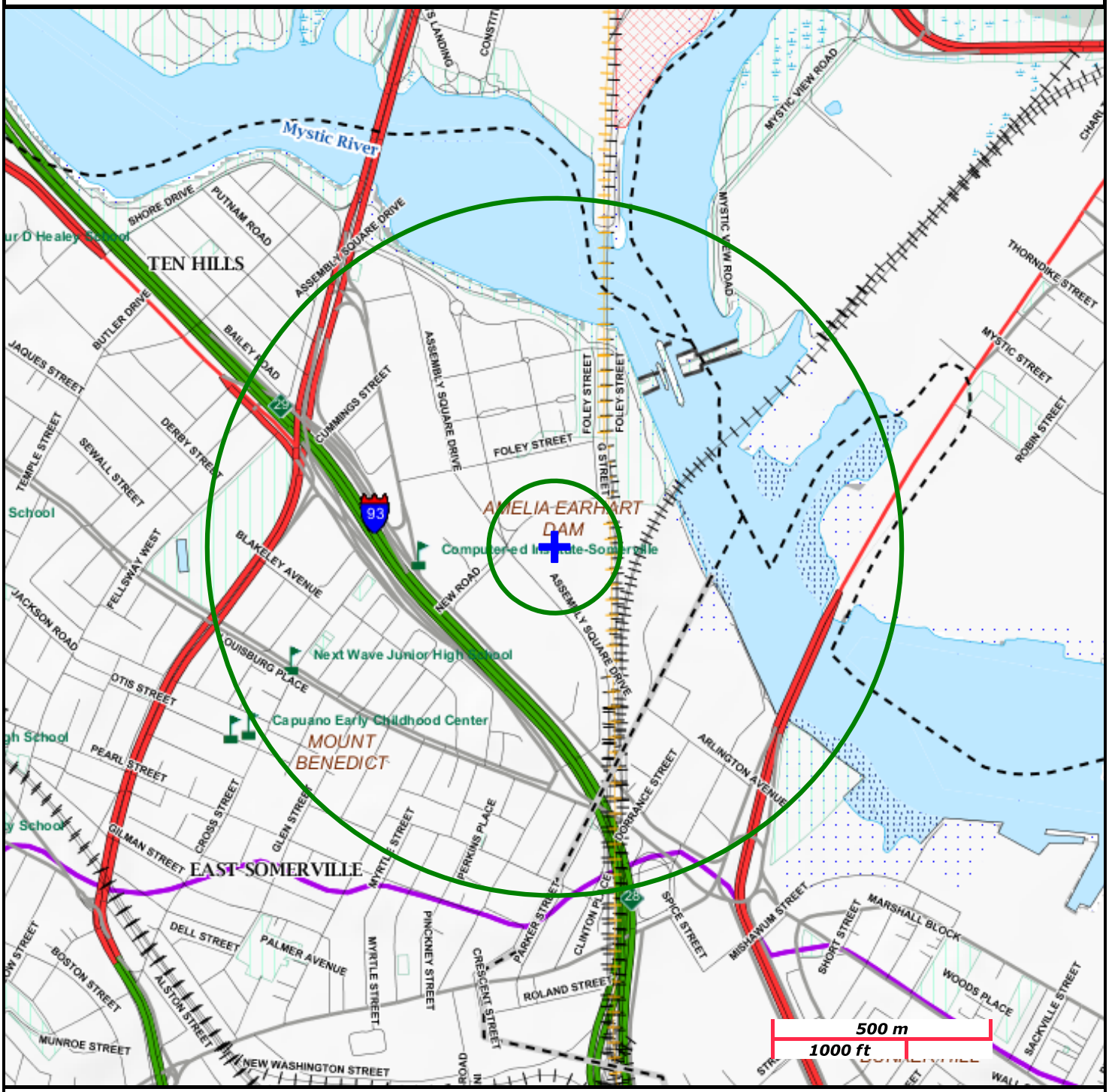
MCP Numerical Ranking System Map: 500 feet & 0.5 Mile Radii

Site Information:
PARTNERS HEALTHCARE ADMINISTRATIVE CAMPUS
ASSEMBLY ROW SOMERVILLE, MA

NAD83 UTM Meters:
4695309mN , 328907mE (Zone: 19)
June 18, 2014

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

MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail
Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct
Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam
Aquifers: Medium Yield, High Yield, EPA Sole Source
Non Potential Drinking Water Source Area: Medium, High (Yield)
PWS Protection Areas: Zone II, IWPA, Zone A
Hydrography: Open Water, PWS Reservoir, Tidal Flat
Wetlands: Freshwater, Saltwater, Cranberry Bog
FEMA 100yr Floodplain; Protected Open Space; ACEC
Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert., Potential
Solid Waste Landfill; PWS: Com.GW,SW, Emerg., Non-Com.

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 7, 2014

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 information currently available to us, no federally listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife 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. No further Endangered Species Act coordination 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 Maria Tur of this office at 603-223-2541 if we can be of further assistance.

Sincerely yours,

Thomas R. Chapman
Supervisor
New England Field Office

APPENDIX D

NATIONAL REGISTER OF HISTORIC PLACES AND MASSACHUSETTS HISTORICAL COMMISSION DOCUMENTATION

Massachusetts Cultural Resource Informatio

MACRIS

MHC Home | MACRIS Home

Results

Get Results in Report Format
PDF Spreadsheet

Below are the results of your search, using the following search criteria:
Town(s): Somerville
Resource Type(s): Area, Building, Burial Ground, Object, Structure
Name: assembly

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

Inv. No.	Property Name	Street	Town	Year
SMV.I	Assembly Square		Somerville	
SMV.670	Ford Motor Company Assembly Plant	Middlesex Ave	Somerville	1

2 Properties Found

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

MHC Home | MACRIS Home

Massachusetts Historical Commission

William Francis Galvin, Secretary of the Commonwealth

Massachusetts Cultural Resource Information System

MACRIS

Scanned forms and photos now available for selected towns!

The Massachusetts Cultural Resource Information System (MACRIS) allows you to search the Massachusetts Historical Commission database for information on historic properties and areas in the Commonwealth.

Users of the database should keep in mind that it does not include information on all historic properties and areas in Massachusetts, nor does it reflect all the information on file on historic properties and areas at the Massachusetts Historical Commission.

Click here to begin your search of the MACRIS database.

Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	SMV.I
Historic Name:	Assembly Square
Common Name:	
Address:	
City/Town:	Somerville
Village/Neighborhood:	East Somerville
Local No:	
Year Constructed:	
Architect(s):	
Architectural Style(s):	
Use(s):	Industrial Complex or District
Significance:	Architecture; Commerce; Industry; Transportation
Area(s):	
Designation(s):	
Building Materials(s):	

The Massachusetts Historical Commission (MHC) has converted this paper record to digital format as part of ongoing projects to scan records of the Inventory of Historic Assets of the Commonwealth and National Register of Historic Places nominations for Massachusetts. Efforts are ongoing and not all inventory or National Register records related to this resource may be available in digital format at this time.

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Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

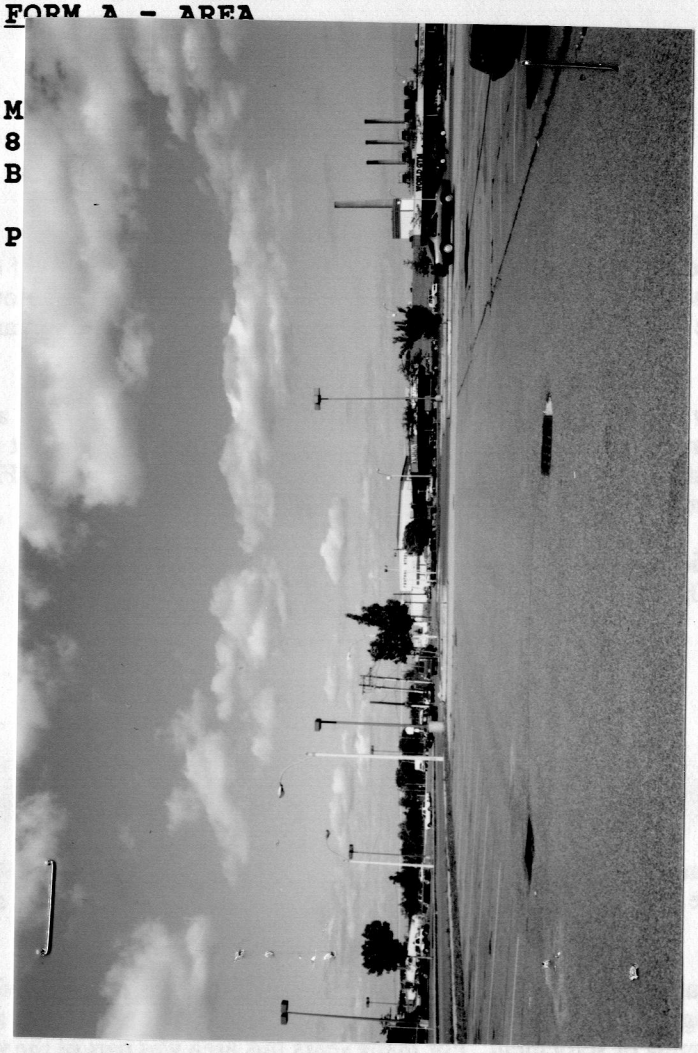
This file was accessed on:

Friday, July 25, 2014 at 1:40: PM

FORM A - AREA

M
8
B

P



View looking north at H. K. Porter

AREA
ASSEMBLY SQUARE

FORM NO.
670,671, 1002-1008

I

Town Somerville

Name of Area Assembly Square

Present Use Commercial and Industrial

General Date or Period ca. 1920 - ca. 1950

General Condition Good to Fair

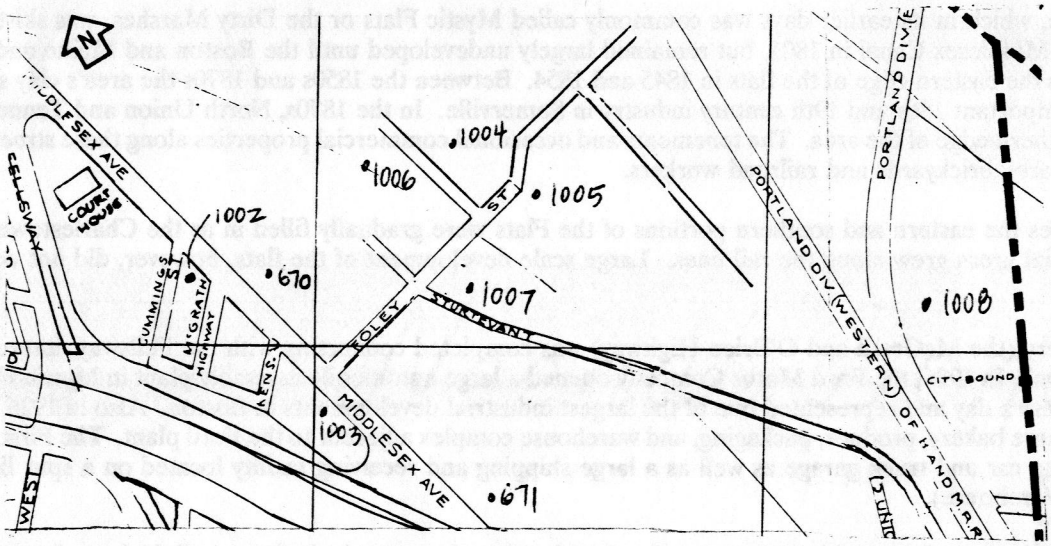
Acreage 50

Recorded By Fitch & Hollister
The Public Archaeology Laboratory, Inc.

Organization Somerville Historic Preservation Comm.

Date May, 1990

MAP



UTM REFERENCE _____

USGS QUADRANGLE _____

SCALE _____

SMV.I

NATIONAL REGISTER CRITERIA STATEMENT

ARCHITECTURAL SIGNIFICANCE

The Assembly Square area is an industrial area located in the extreme northeastern section of the City along the banks of the Mystic River, adjacent to the cities of Boston and Medford. It is bounded by the Mystic River on the north and circled by Route I-93 and the B & M railroad tracks on the south and east. The area was a tidal basin and the marshy, clay soils retarded large scale development until the 1920s.

The buildings are good examples of early to mid-20th century construction techniques and consist of large, brick, steel, and concrete structures. The buildings' setting in a large, open, paved area reflects a modern scale of industrial development for Somerville. At least one structure was architect-designed (First National Stores) and the Mystic Warehouse, part of the First National complex, is the most well-preserved structure in Assembly Square.

All the structures in the area are industrial buildings and significant properties include:
Ford Assembly Plant, 1925, enlarged in 1937, renovated in 1980; First National Stores, 1926, renovated in 1980;
Mystic Warehouse, ca. 1926 (originally part of First National)
Garage, ca. 1926; (originally part of First National)
Central Steel, ca. 1925
Sears Roebuck & Co. Warehouse, 1941; and
H.K. Porter, ca. 1945.

HISTORICAL SIGNIFICANCE

Assembly Square, whose present name is derived from the Ford automobile assembly plant that was located in the area from 1926-1957, is located in the northeastern section of the City along the banks of the Mystic River, adjacent to the cities of Boston and Medford.

The history of Assembly Square is strongly related to its location along the Mystic River and its proximity to rail service. Historically the area comprising Assembly Square was a low-lying tidal marsh of the Mystic River. Because of poor drainage and the area's wet, clay soils, the tidal flats were undesireable for farming or settlement. For many years this area was part of the vast Ten Hills estate of John Winthrop, the first governor of the Massachusetts Bay Colony. It was here in 1636, along the banks of the Mystic River, that Winthrop launched the first ship built in the Massachusetts colony.

The Assembly Square area, which in its earlier days was commonly called Mystic Flats or the Dirty Marshes, was skirted on its southern perimeter by the Middlesex Canal in 1801, but remained largely undeveloped until the Boston and Maine and Eastern Railroads were built across the eastern edge of the flats in 1845 and 1854. Between the 1850s and 1870s the area's clay soils were used for brickmaking, an important 18th and 19th century industry in Somerville. In the 1870s, North Union and Tenney Streets were laid out along the southern edge of the area. The tenements and occasional commercial properties along these streets existed to serve laborers in the nearby brickyards and railroad workers.

During the next few decades the eastern and southern portions of the Flats were gradually filled in as the Charlestown railroad yard expanded and industrial areas grew along the rail lines. Large scale development of the flats, however, did not occur until the 1920s.

In 1925, the Northern Artery (the McGrath and O'Brien Highway) was completed connecting with the Fellsway, improving and expanding north/south travel. In 1926, the Ford Motor Company opened a large automobile assembly plant in Mystic Flats. The plant produced up to 400 cars a day and represented one of the largest industrial developments in Boston. Also in 1926, the First National Stores opened a large bakery, produce, packaging, and warehouse complex adjacent to the Ford plant. The First National facilities included a separate car and truck garage as well as a large shipping and receiving facility located on a spur line of the B & M railroad (Mystic Warehouse).

During the 1930s and 1940s the rest of Assembly Square was developed with various uses including an oil dealer, a Sears Roebuck & Company warehouse (now Paperama/Greybar), the H.K. Porter Company tool manufacturing company, and a metal and steel fabricating company (now Central Steel). Many industries found the area a desirable industrial location because of its excellent rail service, proximity to Boston, flat topography, and accessibility to a large labor pool.

SMV. I

ASSEMBLY SQUARE AREA FORM - Continued

During the late 1950s and into the 1960s Assembly Square businesses began to gradually decline. The Ford Assembly plant closed in 1957 after assembling the unsuccessful Edsel, and the facility was taken over by First National Stores. Improved truck and automobile routes such as I-93, constructed in the early 1960s, made less constricted suburban locations appealing to businesses seeking to expand or modernize their facilities. In the late 1960s Sears closed their warehouse in Assembly Square. By the 1970s First National, the largest employer in Somerville, began consolidating their New England operations in Connecticut, and by 1977 they too had closed their Assembly Square facilities.

Since the late 1970s the Assembly Square area has been targetted for revitalization efforts by the city, and the Ford plant has been renovated into a retail mall. The Sears Warehouse is in commercial and industrial use, and the First National buildings have been renovated into offices. Although demolition and alteration to these structures has occurred over time, most of the buildings retain their original massing and utilitarian appearance.

BIBLIOGRAPHY and/or REFERENCES

Somerville City Directories
Hopkins Maps 1774, 1884
Sanborn Maps 1900-1950
Beyond the Neck, 1983

View looking east

Original yellow form: Eligibility file
Copies: Inventory form
Town file(w/corresp.)
Macris
NR director ____

Community: Somerville

MHC OPINION: ELIGIBILITY FOR NATIONAL REGISTER

Date Received: 12/31/01 Date Due: 1/29/02 Date Reviewed: 1/16/02

Type: __Individual __x District (Attach map indicating boundaries)

Name: Assembly Square Inventory Form: SMV.I, 670-671, 1002-1008

Address: Middlesex Avenue & Foley Streets

Requested by: MEPA

Action: __Honor __ITC __Grant __x R & C __Other:

Agency: ACE Staff in charge of Review: TD

INDIVIDUAL PROPERTIES

__ Eligible
__ Eligible, also in district
__ Eligible only in district
__ Ineligible
__ More information needed

DISTRICTS

__ Eligible
__x Ineligible
__ More information needed

CRITERIA: __A __B __C __D

LEVEL: __Local __State __National

STATEMENT OF SIGNIFICANCE by Taya Dixon

Due to the number of original structures demolished and the high level of alterations to all the remaining properties, the Assembly Square area does not retain sufficient integrity to be eligible for listing on the National Register.

Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	SMV.670
Historic Name:	Ford Motor Company Assembly Plant
Common Name:	Assembly Square Shopping Mall
Address:	Middlesex Ave
City/Town:	Somerville
Village/Neighborhood:	East Somerville
Local No:	
Year Constructed:	
Architect(s):	
Architectural Style(s):	No style
Use(s):	Automobile Factory; Shopping Center; Showroom
Significance:	Architecture; Industry; Transportation
Area(s):	SMV.I: Assembly Square
Designation(s):	
Building Materials(s):	Wall: Brick; Concrete Unspecified

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Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

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Friday, July 25, 2014 at 1:44: PM

FORM B - BUILDING

MASSACHUSETTS HISTORICAL COMMISSION

P1-E SOM USGS BOST, N SECT-A

In Area no.	Form no.
Mystic River	670

photo-1990

1. Town Somerville

Address Middlesex Ave.

Name Ford Motor Co. Assembly Plant

Present use ~~to be shopping mall~~ "Assembly Square"

Present owner East Bay Development Corp.

3. Description:

Date 1926-27

Source Stone, v.1, p. 887

Style

Architect

Exterior wall fabric brick

Outbuildings (describe)

Other features

Altered Rehab Date 1979-80

Moved Date

5. Lot size:

One acre or less Over one acre

Approximate frontage

Approximate distance of building from street

6. Recorded by Peter Stott

Organization Landscape Research

Date 5/79

(over)

37M-7-77

SMV.670

7. Original owner (if known) Ford Motor Co.

Original use automobile assembly plant

Subsequent uses (if any) and dates

8. Themes (check as many as applicable)

Aboriginal		Conservation		Recreation	
Agricultural		Education		Religion	
Architectural		Exploration/ settlement		Science/ invention	
The Arts					
Commerce		Industry	X	Social/ humanitarian	
Communication		Military			
Community development		Political		Transportation	X

9. Historical significance (include explanation of themes checked above)

The Ford Motor Co. opened its first Boston-area assembly plant in Cambridge in 1914. In 1926 the company moved to the present site. The model assembly plant, built at a cost of $4 million, was built near the reputed site of the launching in 1636 of Gov. Winthrop's "Blessing of the Bay." Footings for the marsh ground site on the Mystic River were set 40 feet deep. Industrial historian Orra Stone wrote:

"The factory has a capacity of 400 cars every eight hours and contains 340,000 square feet of floor space. The building embodies the latest idea in one-story structures, and was designed distinctly for the purpose of combining industrial economies and healthful working conditions. It is 1,130 feet in length, divided into 26 bays, and is 301 feet wide, divided into 7 bays, giving a clear span of 40 feet per bay for working operations...With the exception of the office and show room, the structure is one-story high throughout." (Stone, p. 888)

In 1937 the company undertook an expansion of the main assembly building. In 1942 civilian car production was halted and until May 1945 the plant produced T-16 universal carriers for a defense contract, receiving the Army-Navy "E" Award in 1944 for this work.

The company resumed civilian automobile production in Oct. 1945. In 1957 the plant was used for the assembly of the company's new line of Edsels, producing 11,354 cars before stock was exhausted. The following year, on March 14, 1958, citing a 10-year program to consolidate operations in larger plants, the company closed the Somerville plant. For 19 years the facility was used by the adjacent First National Stores, until it too closed in 1977. The main assembly plant is today being rehabilitated by the East Bay Development Corp. for use as a shopping mall, expected to open in October 1980.

10. Bibliography and/or references (such as local histories, deeds, assessor's records, early maps, etc.)

Stone, Orra L., History of Massachusetts Industries (4 vols., Boston, 1930), v. 1, pp.887-889

Somerville Journal, 20 Feb. 1958, 27 Feb. 1958, Feb. 7, 1957

SMV.670

FORM B - BUILDING **CONTINUED**

AREA ASSEMBLY SQUARE

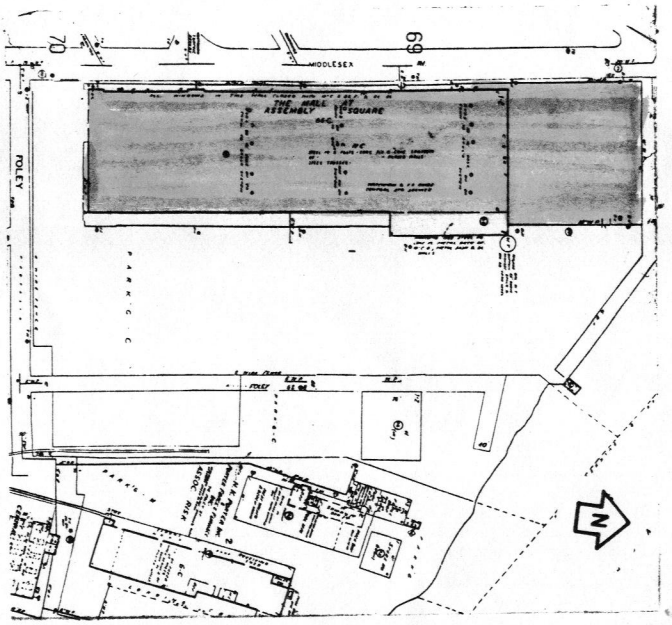
FORM NO. 670

Somerville
Middlesex Avenue
Ford Assembly Plant

NATIONAL REGISTER CRITERIA STATEMENT

ARCHITECTURAL SIGNIFICANCE

The Ford Motor Plant is a very large, one-story, brick structure with a flat roof with sawtooth skylights. The building has minimal decoration, which is primarily located on the southern and eastern facades, and which consists of a simple corbelled cornice, concrete stringcourse, and plain concrete pilaster capitals. The building was rehabilitated in the early 1980s and most of the new alterations were situated on the north facade.



Recorded By Fitch & Hollister, The Public Archaeology Laboratory, Inc.
Organization Somerville Historic Preservation Commission
Date May, 1990

1990

1990

National Register of Historic Places: Listed Properties as of October 1, 2011

Reference Number	State	County	City	Resource Name	Address	Listed Date	Resource Type	Multiple Name
89001240	MASSACHUSETTS	Middlesex	Somerville	Adams, Charles--Woodbury Locke House	178 Central St.	19890918	BUILDING	Somerville MPS
89001239	MASSACHUSETTS	Middlesex	Somerville	Adams--Magoun House	438 Broadway	19890918	BUILDING	Somerville MPS
89001244	MASSACHUSETTS	Middlesex	Somerville	Bacon, Clifton, House	27 Chester St.	19890918	BUILDING	Somerville MPS
89001266	MASSACHUSETTS	Middlesex	Somerville	Barnes, Walter S. and Melissa E., House	140 Highland Ave.	19900308	BUILDING	Somerville MPS
76000274	MASSACHUSETTS	Middlesex	Somerville	Bow Street Historic District	Bow St.	19760326	DISTRICT	
89001252	MASSACHUSETTS	Middlesex	Somerville	Brackett, S. E., House	63 Columbus Ave.	19890918	BUILDING	Somerville MPS
89001238	MASSACHUSETTS	Middlesex	Somerville	Broadway Winter Hill Congregational Church	404 Broadway	19890918	BUILDING	Somerville MPS
89001251	MASSACHUSETTS	Middlesex	Somerville	Brooks, James H., House	61 Columbus Ave.	19890918	BUILDING	Somerville MPS
84002530	MASSACHUSETTS	Middlesex	Somerville	Carr, Martin W., School	25 Atherton St.	19840705	BUILDING	
89001274	MASSACHUSETTS	Middlesex	Somerville	Central Library	79 Highland Ave.	19890918	BUILDING	Somerville MPS
89001280	MASSACHUSETTS	Middlesex	Somerville	Cliff, Z. E., House	29 Powderhouse Terr.	19890918	BUILDING	Somerville MPS
89001250	MASSACHUSETTS	Middlesex	Somerville	Cook, Thomas, House	21 College Hill Rd.	19890918	BUILDING	Somerville MPS
89001257	MASSACHUSETTS	Middlesex	Somerville	Cooper--Davenport Tavern Wing	81 Eustis St.	19890918	BUILDING	Somerville MPS
89001236	MASSACHUSETTS	Middlesex	Somerville	Crowell, C. C., House	85 Benton Rd.	19890918	BUILDING	Somerville MPS
89001225	MASSACHUSETTS	Middlesex	Somerville	Downer Rowhouses (Adams Street)	55 Adams St.	19890918	BUILDING	Somerville MPS
89001241	MASSACHUSETTS	Middlesex	Somerville	Downer Rowhouses (Central Street)	192--200 Central St.	19890918	BUILDING	Somerville MPS
89001264	MASSACHUSETTS	Middlesex	Somerville	First Unitarian Church	130 Highland Ave.	19890918	BUILDING	Somerville MPS
89001262	MASSACHUSETTS	Middlesex	Somerville	First Universalist Church	125 Highland St.	19890918	BUILDING	Somerville MPS
89001270	MASSACHUSETTS	Middlesex	Somerville	Foster, Alexander, House	45 Laurel St.	19890918	BUILDING	Somerville MPS
89001265	MASSACHUSETTS	Middlesex	Somerville	Gaut, Samuel, House	137 Highland Ave.	19890918	BUILDING	Somerville MPS
89001275	MASSACHUSETTS	Middlesex	Somerville	Grandview, The	82 Munroe St.	19890918	BUILDING	Somerville MPS
89001260	MASSACHUSETTS	Middlesex	Somerville	Highland, The	66 Highland St.	19890918	BUILDING	Somerville MPS
89001296	MASSACHUSETTS	Middlesex	Somerville	Hollander Blocks	Walnut St. and Pleasant Ave.	19890918	DISTRICT	Somerville MPS
89001284	MASSACHUSETTS	Middlesex	Somerville	Hopkins, Elisha, House	237 School St.	19890918	BUILDING	Somerville MPS
89001230	MASSACHUSETTS	Middlesex	Somerville	House at 10 Arlington Street	10 Arlington St.	19890918	BUILDING	Somerville MPS
89001245	MASSACHUSETTS	Middlesex	Somerville	House at 14 Chestnut Street	14 Chestnut St.	19890918	BUILDING	Somerville MPS
89001279	MASSACHUSETTS	Middlesex	Somerville	House at 16--18 Preston Road	16--18 Preston Rd.	19890918	BUILDING	Somerville MPS
89001273	MASSACHUSETTS	Middlesex	Somerville	House at 197 Morrison Avenue	197 Morrison Ave.	19890918	BUILDING	Somerville MPS
89001255	MASSACHUSETTS	Middlesex	Somerville	House at 21 Dartmouth Street	21 Dartmouth St.	19890918	BUILDING	Somerville MPS
89001247	MASSACHUSETTS	Middlesex	Somerville	House at 25 Clyde Street	25 Clyde St.	19890918	BUILDING	Somerville MPS
89001302	MASSACHUSETTS	Middlesex	Somerville	House at 29 Mt. Vernon Street	29 Mt. Vernon St.	19890918	BUILDING	Somerville MPS
89001267	MASSACHUSETTS	Middlesex	Somerville	House at 343 Highland Avenue	343 Highland Ave.	19890918	BUILDING	Somerville MPS
89001288	MASSACHUSETTS	Middlesex	Somerville	House at 35 Temple Street	35 Temple St.	19890918	BUILDING	Somerville MPS
89001290	MASSACHUSETTS	Middlesex	Somerville	House at 42 Vinal Avenue	42 Vinal Ave.	19890918	BUILDING	Somerville MPS
89001292	MASSACHUSETTS	Middlesex	Somerville	House at 49 Vinal Avenue	49 Vinal Ave.	19890918	BUILDING	Somerville MPS
89001281	MASSACHUSETTS	Middlesex	Somerville	House at 5 Prospect Hill	5 Prospect Hill	19890918	BUILDING	Somerville MPS
89001269	MASSACHUSETTS	Middlesex	Somerville	House at 6 Kent Court	6 Kent Ct.	19890918	BUILDING	Somerville MPS
89001254	MASSACHUSETTS	Middlesex	Somerville	House at 72R Dane Street	72R Dane St.	19890918	BUILDING	Somerville MPS
89001277	MASSACHUSETTS	Middlesex	Somerville	House at 81 Pearl Street	81 Pearl St.	19890918	BUILDING	Somerville MPS
89001232	MASSACHUSETTS	Middlesex	Somerville	Houses at 28--36 Beacon Street	28--36 Beacon St.	19890918	BUILDING	Somerville MPS
89001299	MASSACHUSETTS	Middlesex	Somerville	Ireland, Samuel, House	117 Washington	19890918	BUILDING	Somerville MPS
98000095	MASSACHUSETTS	Middlesex	Somerville	James, Joseph K., House	83 Belmont St.	19980211	BUILDING	Somerville MPS
89001224	MASSACHUSETTS	Middlesex	Somerville	Keyes, Amos, House	12 Adams St.	19890918	BUILDING	Somerville MPS
89001256	MASSACHUSETTS	Middlesex	Somerville	Knight, R. A.--Eugene Lacount House	34 Day St.	19890918	BUILDING	Somerville MPS
89001259	MASSACHUSETTS	Middlesex	Somerville	Langmaid Building	48--52 Highland Ave.	19890918	BUILDING	Somerville MPS
89001237	MASSACHUSETTS	Middlesex	Somerville	Langmaid Terrace	359--365 Broadway	19890918	BUILDING	Somerville MPS
89001249	MASSACHUSETTS	Middlesex	Somerville	Lockhardt, Charles H., House	88 College Ave.	19890918	BUILDING	Somerville MPS
89001263	MASSACHUSETTS	Middlesex	Somerville	Loring, George, House	76 Highland Ave.	19890918	BUILDING	Somerville MPS
89001297	MASSACHUSETTS	Middlesex	Somerville	Lovejoy, A. L., House	30 Warren Ave.	19890918	BUILDING	Somerville MPS
89001223	MASSACHUSETTS	Middlesex	Somerville	Mt. Vernon Street Historic District	8--24 Mt. Vernon St.	19890918	DISTRICT	Somerville MPS
89001294	MASSACHUSETTS	Middlesex	Somerville	Munroe, Robert, House	37 Walnut St.	19890918	BUILDING	Somerville MPS
89002255	MASSACHUSETTS	Middlesex	Somerville	Mystic Pumping Station	Alewife Brook Pkwy.	19900118	BUILDING	Water Supply System of Metropolitan Boston MPS
89001227	MASSACHUSETTS	Middlesex	Somerville	Mystic Water Works	Alewife Brook Pkwy. and Capen St.	19890918	BUILDING	Somerville MPS
89001285	MASSACHUSETTS	Middlesex	Somerville	Nichols, John F., House	17 Summit St.	19890918	BUILDING	Somerville MPS
89001276	MASSACHUSETTS	Middlesex	Somerville	Niles, Louville V., House	97 Munroe St.	19890918	BUILDING	Somerville MPS
89001295	MASSACHUSETTS	Middlesex	Somerville	Niles, Louville, House	45 Walnut St.	19890918	BUILDING	Somerville MPS

National Register of Historic Places: Listed Properties as of October 1, 2011

Reference Number	State	County	City	Resource Name	Address	Listed Date	Resource Type	Multiple Name
89001301	MASSACHUSETTS	Middlesex	Somerville	Old Cemetery	Somerville Ave. and School St.	19890918	SITE	Somerville MPS
89001289	MASSACHUSETTS	Middlesex	Somerville	Otis--Wyman House	67 Thurston St.	19890918	BUILDING	Somerville MPS
89001291	MASSACHUSETTS	Middlesex	Somerville	Parker--Burnett House	48 Vinal Ave.	19890918	BUILDING	Somerville MPS
75000287	MASSACHUSETTS	Middlesex	Somerville	Powder House Park	Powder House Circle	19750421	DISTRICT	
89001278	MASSACHUSETTS	Middlesex	Somerville	Prescott, Gustavus G., House	65--67 Perkins St.	19890918	BUILDING	Somerville MPS
99001125	MASSACHUSETTS	Middlesex	Somerville	Rosebud, The	381 Summer St.	19990922	BUILDING	Diners of Massachusetts MPS
89001282	MASSACHUSETTS	Middlesex	Somerville	Russell, Philemon, House	25 Russell St.	19890918	BUILDING	Somerville MPS
89001286	MASSACHUSETTS	Middlesex	Somerville	Russell, Susan, House	58 Sycamore St.	19890918	BUILDING	Somerville MPS
89001298	MASSACHUSETTS	Middlesex	Somerville	Schuebeler, Charles, House	384 Washington St.	19890918	BUILDING	Somerville MPS
89001234	MASSACHUSETTS	Middlesex	Somerville	Snow, Lemuel, Jr., House	81 Benton Rd.	19890918	BUILDING	Somerville MPS
89001261	MASSACHUSETTS	Middlesex	Somerville	Somerville High School	93 Highland St.	19890918	BUILDING	Somerville MPS
89001300	MASSACHUSETTS	Middlesex	Somerville	Somerville Journal Building	8--10 Walnut St.	19890918	BUILDING	Somerville MPS
89002330	MASSACHUSETTS	Middlesex	Somerville	Somerville Theatre	55 Davis Sq.	19900126	BUILDING	Somerville MPS
89001222	MASSACHUSETTS	Middlesex	Somerville	Spring Hill Historic District	Roughly bounded by Summer, Central, Athe	19890918	DISTRICT	Somerville MPS
89001287	MASSACHUSETTS	Middlesex	Somerville	Tufts, Peter and Oliver, House	78 Sycamore St.	19890918	BUILDING	Somerville MPS
86001247	MASSACHUSETTS	Middlesex	Somerville	US Post Office--Somerville Main	237 Washington St.	19860530	BUILDING	
89001283	MASSACHUSETTS	Middlesex	Somerville	Warren, H., House	205 School St.	19890918	BUILDING	Somerville MPS
89001248	MASSACHUSETTS	Middlesex	Somerville	West Somerville Branch Library	40 College Ave.	19890918	BUILDING	Somerville MPS
89001221	MASSACHUSETTS	Middlesex	Somerville	Westwood Road Historic District	Roughly bounded by Summer St., Benton Rd	19890918	DISTRICT	Somerville MPS
89001253	MASSACHUSETTS	Middlesex	Somerville	Williams, Charles, House	108 Cross St.	19890918	BUILDING	Somerville MPS
89001228	MASSACHUSETTS	Middlesex	Somerville	Williams, Charles, Jr., House	1 Arlington St.	19890918	BUILDING	Somerville MPS
89001226	MASSACHUSETTS	Middlesex	Somerville	Williams, F. G., House	37 Albion St.	19890918	BUILDING	Somerville MPS
89001272	MASSACHUSETTS	Middlesex	Somerville	Worthen, Daniel, House	8 Mt. Pleasant St.	19890918	BUILDING	Somerville MPS
89001293	MASSACHUSETTS	Middlesex	Somerville	Wright House	54 Vinal Ave.	19890918	BUILDING	Somerville MPS
89001233	MASSACHUSETTS	Middlesex	Somerville	Wyatt, George, House	33 Beacon St.	19890918	BUILDING	Somerville MPS

Reference Number	Resource Name	Address	State	County	City	Primary Cert	Primary Certdate	Multiple Property Name
89001240	Adams, Charles--Woodbury Locke House	178 Central St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001239	Adams--Magoun House	438 Broadway	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001244	Bacon, Clifton, House	27 Chester St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001266	Barnes, Walter S. and Melissa E., House	140 Highland Ave.	MASSACHUSETTS	Middlesex	Somerville	LI	19900308	Somerville MPS
76000274	Bow Street Historic District	Bow St.	MASSACHUSETTS	Middlesex	Somerville	LI	19760326	
89001252	Brackett, S. E., House	63 Columbus Ave.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001238	Broadway Winter Hill Congregational Church	404 Broadway	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001251	Brooks, James H., House	61 Columbus Ave.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
84002530	Carr, Martin W., School	25 Atherton St.	MASSACHUSETTS	Middlesex	Somerville	LI	19840705	
89001274	Central Library	79 Highland Ave.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001280	Cliff, Z. E., House	29 Powderhouse Terr.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001250	Cook, Thomas, House	21 College Hill Rd.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001257	Cooper--Davenport Tavern Wing	81 Eustis St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001236	Crowell, C. C., House	85 Benton Rd.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001225	Downer Rowhouses (Adams Street)	55 Adams St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001241	Downer Rowhouses (Central Street)	192--200 Central St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001264	First Unitarian Church	130 Highland Ave.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001262	First Universalist Church	125 Highland St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001270	Foster, Alexander, House	45 Laurel St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001265	Gaut, Samuel, House	137 Highland Ave.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001275	Grandview, The	82 Munroe St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001260	Highland, The	66 Highland St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001296	Hollander Blocks	Walnut St. and Pleasant	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001284	Hopkins, Elisha, House	237 School St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001230	House at 10 Arlington Street	10 Arlington St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001245	House at 14 Chestnut Street	14 Chestnut St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001279	House at 16--18 Preston Road	16--18 Preston Rd.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001273	House at 197 Morrison Avenue	197 Morrison Ave.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001255	House at 21 Dartmouth Street	21 Dartmouth St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001247	House at 25 Clyde Street	25 Clyde St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001302	House at 29 Mt. Vernon Street	29 Mt. Vernon St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001267	House at 343 Highland Avenue	343 Highland Ave.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001288	House at 35 Temple Street	35 Temple St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001290	House at 42 Vinal Avenue	42 Vinal Ave.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001292	House at 49 Vinal Avenue	49 Vinal Ave.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001281	House at 5 Prospect Hill	5 Prospect Hill	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001269	House at 6 Kent Court	6 Kent Ct.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001254	House at 72R Dane Street	72R Dane St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001277	House at 81 Pearl Street	81 Pearl St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001232	Houses at 28--36 Beacon Street	28--36 Beacon St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001299	Ireland, Samuel, House	117 Washington	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
98000095	James, Joseph K., House	83 Belmont St.	MASSACHUSETTS	Middlesex	Somerville	LI	19980211	Somerville MPS
89001224	Keyes, Amos, House	12 Adams St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001256	Knight, R. A.--Eugene Lacount House	34 Day St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001259	Langmaid Building	48--52 Highland Ave.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001237	Langmaid Terrace	359--365 Broadway	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001249	Lockhardt, Charles H., House	88 College Ave.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001263	Loring, George, House	76 Highland Ave.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001297	Lovejoy, A. L., House	30 Warren Ave.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001223	Mt. Vernon Street Historic District	8--24 Mt. Vernon St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001294	Munroe, Robert, House	37 Walnut St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89002255	Mystic Pumping Station	Alewife Brook Pkwy.	MASSACHUSETTS	Middlesex	Somerville	LI	19900118	Water Supply System of Metropolitan Boston MPS
89001227	Mystic Water Works	Alewife Brook Pkwy. an	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001285	Nichols, John F., House	17 Summit St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001276	Niles, Louville V., House	97 Munroe St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001295	Niles, Louville, House	45 Walnut St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001301	Old Cemetery	Somerville Ave. and Sch	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001289	Otis--Wyman House	67 Thurston St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS

Reference Number	Resource Name	Address	State	County	City	Primary Cert	Primary Certdate	Multiple Property Name
89001291	Parker--Burnett House	48 Vinal Ave.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
75000287	Powder House Park	Powder House Circle	MASSACHUSETTS	Middlesex	Somerville	LI	19750421	
89001278	Prescott, Gustavus G., House	65--67 Perkins St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
99001125	Rosebud, The	381 Summer St.	MASSACHUSETTS	Middlesex	Somerville	LI	19990922	Diners of Massachusetts MPS
89001282	Russell, Philemon, House	25 Russell St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001286	Russell, Susan, House	58 Sycamore St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001298	Schuebeler, Charles, House	384 Washington St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001234	Snow, Lemuel, Jr., House	81 Benton Rd.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001261	Somerville High School	93 Highland St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001300	Somerville Journal Building	8--10 Walnut St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89002330	Somerville Theatre	55 Davis Sq.	MASSACHUSETTS	Middlesex	Somerville	LI	19900126	Somerville MPS
89001222	Spring Hill Historic District	Roughly bounded by Su	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001287	Tufts, Peter and Oliver, House	78 Sycamore St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
86001247	US Post Office--Somerville Main	237 Washington St.	MASSACHUSETTS	Middlesex	Somerville	LI	19860530	
89001283	Warren, H., House	205 School St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001248	West Somerville Branch Library	40 College Ave.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001221	Westwood Road Historic District	Roughly bounded by Su	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001253	Williams, Charles, House	108 Cross St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001228	Williams, Charles, Jr., House	1 Arlington St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001226	Williams, F. G., House	37 Albion St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001272	Worthen, Daniel, House	8 Mt. Pleasant St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001293	Wright House	54 Vinal Ave.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS
89001233	Wyatt, George, House	33 Beacon St.	MASSACHUSETTS	Middlesex	Somerville	LI	19890918	Somerville MPS

APPENDIX E

LABORATORY DATA

ANALYTICAL REPORT

Lab Number:	L1415327
Client:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129-1400
ATTN:	Iliana Alvarado
Phone:	(617) 886-7448
Project Name:	PROPOSED PARTNERS HEALTHCARE
Project Number:	40798-015
Report Date:	07/16/14

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1415327-01	HA14-PB10S (OW)	WATER	Not Specified	07/10/14 09:45	07/10/14
L1415327-02	HA14-PB13S (OW)	WATER	Not Specified	07/10/14 11:40	07/10/14
L1415327-03	TRIP BLANK	WATER	Not Specified	07/10/14 00:00	07/10/14

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327
Project Number: 40798-015 **Report Date:** 07/16/14

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327
Project Number: 40798-015 **Report Date:** 07/16/14

Case Narrative (continued)

Volatile Organics

The continuing calibration standard, associated with L1415327-01 (HA14-PB10S (OW)) and the associated QC samples, was above the acceptance criteria for tert-butyl alcohol (52%D). The results for this compound should be considered estimated. The sample was re-analyzed from a compromised vial and the criteria were achieved. The results of both analyses are reported.

The WG705561-1/-2 LCS/LCSD recoveries, associated with L1415327-01 (HA14-PB10S (OW)) and -02 (HA14-PB13S (OW)), are above the acceptance criteria for tert-butyl alcohol (152%/231%).

Metals

The WG705128-3 Laboratory Duplicate RPD, performed on L1415327-02 (HA14-PB13S (OW)), is above the acceptance criteria for lead (57%); however, the sample and duplicate results are less than five times the reporting limit. Therefore, the RPD is valid.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kelly Stenstrom

Title: Technical Director/Representative Date: 07/16/14

ORGANICS

VOLATILES

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID:	L1415327-01	Date Collected:	07/10/14 09:45
Client ID:	HA14-PB10S (OW)	Date Received:	07/10/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C		
Analytical Date:	07/14/14 13:26		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	--	1
1,1-Dichloroethane	ND		ug/l	0.75	--	1
Chloroform	ND		ug/l	0.75	--	1
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,2-Dichloropropane	ND		ug/l	1.8	--	1
Dibromochloromethane	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
Chlorobenzene	40		ug/l	0.50	--	1
Trichlorofluoromethane	ND		ug/l	2.5	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
Bromodichloromethane	ND		ug/l	0.50	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.5	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	0.75	--	1
Ethylbenzene	ND		ug/l	0.50	--	1
Chloromethane	ND		ug/l	2.5	--	1
Bromomethane	ND		ug/l	1.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	1.0	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	--	1
1,2-Dichloroethene, Total	ND		ug/l	0.50	--	1
Trichloroethene	ND		ug/l	0.50	--	1

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID: L1415327-01 Date Collected: 07/10/14 09:45

Client ID: HA14-PB10S (OW) Date Received: 07/10/14

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	--	1
1,3-Dichlorobenzene	ND		ug/l	2.5	--	1
1,4-Dichlorobenzene	ND		ug/l	2.5	--	1
Methyl tert butyl ether	ND		ug/l	1.0	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
Dibromomethane	ND		ug/l	5.0	--	1
1,4-Dichlorobutane	ND		ug/l	5.0	--	1
1,2,3-Trichloropropane	ND		ug/l	5.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	5.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
Vinyl acetate	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Ethyl methacrylate	ND		ug/l	5.0	--	1
Acrylonitrile	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.5	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	1
2,2-Dichloropropane	ND		ug/l	2.5	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.5	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Bromobenzene	ND		ug/l	2.5	--	1
n-Butylbenzene	ND		ug/l	0.50	--	1
sec-Butylbenzene	ND		ug/l	0.50	--	1
tert-Butylbenzene	ND		ug/l	2.5	--	1
o-Chlorotoluene	ND		ug/l	2.5	--	1
p-Chlorotoluene	ND		ug/l	2.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Isopropylbenzene	ND		ug/l	0.50	--	1
p-Isopropyltoluene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	2.5	--	1
n-Propylbenzene	ND		ug/l	0.50	--	1

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID:	L1415327-01	Date Collected:	07/10/14 09:45
Client ID:	HA14-PB10S (OW)	Date Received:	07/10/14
Sample Location:	Not Specified	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--	1
Ethyl ether	ND		ug/l	2.5	--	1
Tert-Butyl Alcohol	71		ug/l	10	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	88		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	104		70-130

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID:	L1415327-01	Date Collected:	07/10/14 09:45
Client ID:	HA14-PB10S (OW)	Date Received:	07/10/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C-SIM(M)		
Analytical Date:	07/14/14 13:51		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-SIM - Westborough Lab						
1,4-Dioxane	ND		ug/l	3.0	--	1

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID:	L1415327-01	Date Collected:	07/10/14 09:45
Client ID:	HA14-PB10S (OW)	Date Received:	07/10/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	14,504.1	Extraction Date:	07/14/14 11:00
Analytical Date:	07/15/14 01:27		
Analyst:	SH		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	--	1	A

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID:	L1415327-01	R	Date Collected:	07/10/14 09:45
Client ID:	HA14-PB10S (OW)		Date Received:	07/10/14
Sample Location:	Not Specified		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	1,8260C			
Analytical Date:	07/16/14 15:15			
Analyst:	PD			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	--	1
1,1-Dichloroethane	ND		ug/l	0.75	--	1
Chloroform	ND		ug/l	0.75	--	1
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,2-Dichloropropane	ND		ug/l	1.8	--	1
Dibromochloromethane	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
Chlorobenzene	18		ug/l	0.50	--	1
Trichlorofluoromethane	ND		ug/l	2.5	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
Bromodichloromethane	ND		ug/l	0.50	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.5	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	0.75	--	1
Ethylbenzene	ND		ug/l	0.50	--	1
Chloromethane	ND		ug/l	2.5	--	1
Bromomethane	ND		ug/l	1.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	1.0	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	--	1
1,2-Dichloroethene, Total	ND		ug/l	0.50	--	1
Trichloroethene	ND		ug/l	0.50	--	1

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID: L1415327-01 R Date Collected: 07/10/14 09:45

Client ID: HA14-PB10S (OW) Date Received: 07/10/14

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	--	1
1,3-Dichlorobenzene	ND		ug/l	2.5	--	1
1,4-Dichlorobenzene	ND		ug/l	2.5	--	1
Methyl tert butyl ether	ND		ug/l	1.0	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
Dibromomethane	ND		ug/l	5.0	--	1
1,4-Dichlorobutane	ND		ug/l	5.0	--	1
1,2,3-Trichloropropane	ND		ug/l	5.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	5.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
Vinyl acetate	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Ethyl methacrylate	ND		ug/l	5.0	--	1
Acrylonitrile	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.5	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	1
2,2-Dichloropropane	ND		ug/l	2.5	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.5	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Bromobenzene	ND		ug/l	2.5	--	1
n-Butylbenzene	ND		ug/l	0.50	--	1
sec-Butylbenzene	ND		ug/l	0.50	--	1
tert-Butylbenzene	ND		ug/l	2.5	--	1
o-Chlorotoluene	ND		ug/l	2.5	--	1
p-Chlorotoluene	ND		ug/l	2.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Isopropylbenzene	ND		ug/l	0.50	--	1
p-Isopropyltoluene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	2.5	--	1
n-Propylbenzene	ND		ug/l	0.50	--	1

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID:	L1415327-01	R	Date Collected:	07/10/14 09:45
Client ID:	HA14-PB10S (OW)		Date Received:	07/10/14
Sample Location:	Not Specified		Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--	1
Ethyl ether	ND		ug/l	2.5	--	1
Tert-Butyl Alcohol	ND		ug/l	10	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	102		70-130

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID:	L1415327-02	Date Collected:	07/10/14 11:40
Client ID:	HA14-PB13S (OW)	Date Received:	07/10/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C		
Analytical Date:	07/14/14 13:57		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	--	1
1,1-Dichloroethane	ND		ug/l	0.75	--	1
Chloroform	ND		ug/l	0.75	--	1
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,2-Dichloropropane	ND		ug/l	1.8	--	1
Dibromochloromethane	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
Chlorobenzene	ND		ug/l	0.50	--	1
Trichlorofluoromethane	ND		ug/l	2.5	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
Bromodichloromethane	ND		ug/l	0.50	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.5	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	0.75	--	1
Ethylbenzene	ND		ug/l	0.50	--	1
Chloromethane	ND		ug/l	2.5	--	1
Bromomethane	ND		ug/l	1.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	1.0	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	--	1
1,2-Dichloroethene, Total	ND		ug/l	0.50	--	1
Trichloroethene	ND		ug/l	0.50	--	1

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID: L1415327-02 Date Collected: 07/10/14 11:40

Client ID: HA14-PB13S (OW) Date Received: 07/10/14

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	--	1
1,3-Dichlorobenzene	ND		ug/l	2.5	--	1
1,4-Dichlorobenzene	ND		ug/l	2.5	--	1
Methyl tert butyl ether	ND		ug/l	1.0	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
Dibromomethane	ND		ug/l	5.0	--	1
1,4-Dichlorobutane	ND		ug/l	5.0	--	1
1,2,3-Trichloropropane	ND		ug/l	5.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	5.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
Vinyl acetate	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Ethyl methacrylate	ND		ug/l	5.0	--	1
Acrylonitrile	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.5	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	1
2,2-Dichloropropane	ND		ug/l	2.5	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.5	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Bromobenzene	ND		ug/l	2.5	--	1
n-Butylbenzene	ND		ug/l	0.50	--	1
sec-Butylbenzene	ND		ug/l	0.50	--	1
tert-Butylbenzene	ND		ug/l	2.5	--	1
o-Chlorotoluene	ND		ug/l	2.5	--	1
p-Chlorotoluene	ND		ug/l	2.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Isopropylbenzene	ND		ug/l	0.50	--	1
p-Isopropyltoluene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	2.5	--	1
n-Propylbenzene	ND		ug/l	0.50	--	1

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID:	L1415327-02	Date Collected:	07/10/14 11:40
Client ID:	HA14-PB13S (OW)	Date Received:	07/10/14
Sample Location:	Not Specified	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--	1
Ethyl ether	ND		ug/l	2.5	--	1
Tert-Butyl Alcohol	ND		ug/l	10	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	88		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	103		70-130

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID:	L1415327-02	Date Collected:	07/10/14 11:40
Client ID:	HA14-PB13S (OW)	Date Received:	07/10/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C-SIM(M)		
Analytical Date:	07/14/14 14:27		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-SIM - Westborough Lab						
1,4-Dioxane	ND		ug/l	3.0	--	1

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID:	L1415327-02	Date Collected:	07/10/14 11:40
Client ID:	HA14-PB13S (OW)	Date Received:	07/10/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	14,504.1	Extraction Date:	07/14/14 11:00
Analytical Date:	07/15/14 01:44		
Analyst:	SH		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	--	1	A

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 14,504.1
Analytical Date: 07/15/14 00:37
Analyst: SH

Extraction Date: 07/14/14 11:00

Parameter	Result	Qualifier	Units	RL	MDL	
Microextractables by GC - Westborough Lab for sample(s): 01-02 Batch: WG705417-1						
1,2-Dibromoethane	ND		ug/l	0.010	--	A

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C-SIM(M)
Analytical Date: 07/14/14 11:20
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG705554-3					
1,4-Dioxane	ND		ug/l	3.0	--

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/14/14 12:25
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG705561-3					
Methylene chloride	ND		ug/l	3.0	--
1,1-Dichloroethane	ND		ug/l	0.75	--
Chloroform	ND		ug/l	0.75	--
Carbon tetrachloride	ND		ug/l	0.50	--
1,2-Dichloropropane	ND		ug/l	1.8	--
Dibromochloromethane	ND		ug/l	0.50	--
1,1,2-Trichloroethane	ND		ug/l	0.75	--
Tetrachloroethene	ND		ug/l	0.50	--
Chlorobenzene	ND		ug/l	0.50	--
Trichlorofluoromethane	ND		ug/l	2.5	--
1,2-Dichloroethane	ND		ug/l	0.50	--
1,1,1-Trichloroethane	ND		ug/l	0.50	--
Bromodichloromethane	ND		ug/l	0.50	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,3-Dichloropropene, Total	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.5	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	0.75	--
Ethylbenzene	ND		ug/l	0.50	--
Chloromethane	ND		ug/l	2.5	--
Bromomethane	ND		ug/l	1.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	1.0	--
1,1-Dichloroethene	ND		ug/l	0.50	--
trans-1,2-Dichloroethene	ND		ug/l	0.75	--
1,2-Dichloroethene, Total	ND		ug/l	0.50	--

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/14/14 12:25
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG705561-3					
Trichloroethene	ND		ug/l	0.50	--
1,2-Dichlorobenzene	ND		ug/l	2.5	--
1,3-Dichlorobenzene	ND		ug/l	2.5	--
1,4-Dichlorobenzene	ND		ug/l	2.5	--
Methyl tert butyl ether	ND		ug/l	1.0	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
Dibromomethane	ND		ug/l	5.0	--
1,4-Dichlorobutane	ND		ug/l	5.0	--
1,2,3-Trichloropropane	ND		ug/l	5.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	5.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	5.0	--
2-Butanone	ND		ug/l	5.0	--
Vinyl acetate	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Ethyl methacrylate	ND		ug/l	5.0	--
Acrylonitrile	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.5	--
Tetrahydrofuran	ND		ug/l	5.0	--
2,2-Dichloropropane	ND		ug/l	2.5	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.5	--
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--
Bromobenzene	ND		ug/l	2.5	--

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/14/14 12:25
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG705561-3					
n-Butylbenzene	ND		ug/l	0.50	--
sec-Butylbenzene	ND		ug/l	0.50	--
tert-Butylbenzene	ND		ug/l	2.5	--
o-Chlorotoluene	ND		ug/l	2.5	--
p-Chlorotoluene	ND		ug/l	2.5	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Isopropylbenzene	ND		ug/l	0.50	--
p-Isopropyltoluene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	2.5	--
n-Propylbenzene	ND		ug/l	0.50	--
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--
Ethyl ether	ND		ug/l	2.5	--
Tert-Butyl Alcohol	ND		ug/l	10	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	105		70-130

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/16/14 14:47
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG705561-6					
Methylene chloride	ND		ug/l	3.0	--
1,1-Dichloroethane	ND		ug/l	0.75	--
Chloroform	ND		ug/l	0.75	--
Carbon tetrachloride	ND		ug/l	0.50	--
1,2-Dichloropropane	ND		ug/l	1.8	--
Dibromochloromethane	ND		ug/l	0.50	--
1,1,2-Trichloroethane	ND		ug/l	0.75	--
Tetrachloroethene	ND		ug/l	0.50	--
Chlorobenzene	ND		ug/l	0.50	--
Trichlorofluoromethane	ND		ug/l	2.5	--
1,2-Dichloroethane	ND		ug/l	0.50	--
1,1,1-Trichloroethane	ND		ug/l	0.50	--
Bromodichloromethane	ND		ug/l	0.50	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,3-Dichloropropene, Total	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.5	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	0.75	--
Ethylbenzene	ND		ug/l	0.50	--
Chloromethane	ND		ug/l	2.5	--
Bromomethane	ND		ug/l	1.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	1.0	--
1,1-Dichloroethene	ND		ug/l	0.50	--
trans-1,2-Dichloroethene	ND		ug/l	0.75	--
1,2-Dichloroethene, Total	ND		ug/l	0.50	--

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/16/14 14:47
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG705561-6					
Trichloroethene	ND		ug/l	0.50	--
1,2-Dichlorobenzene	ND		ug/l	2.5	--
1,3-Dichlorobenzene	ND		ug/l	2.5	--
1,4-Dichlorobenzene	ND		ug/l	2.5	--
Methyl tert butyl ether	ND		ug/l	1.0	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
Dibromomethane	ND		ug/l	5.0	--
1,4-Dichlorobutane	ND		ug/l	5.0	--
1,2,3-Trichloropropane	ND		ug/l	5.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	5.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	5.0	--
2-Butanone	ND		ug/l	5.0	--
Vinyl acetate	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Ethyl methacrylate	ND		ug/l	5.0	--
Acrylonitrile	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.5	--
Tetrahydrofuran	ND		ug/l	5.0	--
2,2-Dichloropropane	ND		ug/l	2.5	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.5	--
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--
Bromobenzene	ND		ug/l	2.5	--

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/16/14 14:47
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG705561-6					
n-Butylbenzene	ND		ug/l	0.50	--
sec-Butylbenzene	ND		ug/l	0.50	--
tert-Butylbenzene	ND		ug/l	2.5	--
o-Chlorotoluene	ND		ug/l	2.5	--
p-Chlorotoluene	ND		ug/l	2.5	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Isopropylbenzene	ND		ug/l	0.50	--
p-Isopropyltoluene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	2.5	--
n-Propylbenzene	ND		ug/l	0.50	--
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--
Ethyl ether	ND		ug/l	2.5	--
Tert-Butyl Alcohol	ND		ug/l	10	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	101		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE

Project Number: 40798-015

Lab Number: L1415327

Report Date: 07/16/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG705417-2									
1,2-Dibromoethane	97		-		70-130	-		20	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE

Project Number: 40798-015

Lab Number: L1415327

Report Date: 07/16/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG705554-1 WG705554-2								
1,4-Dioxane	99		83		70-130	18		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG705561-1 WG705561-2								
Methylene chloride	82		95		70-130	15		20
1,1-Dichloroethane	89		104		70-130	16		20
Chloroform	92		109		70-130	17		20
Carbon tetrachloride	84		101		63-132	18		20
1,2-Dichloropropane	97		113		70-130	15		20
Dibromochloromethane	90		102		63-130	13		20
1,1,2-Trichloroethane	98		112		70-130	13		20
Tetrachloroethene	82		96		70-130	16		20
Chlorobenzene	88		101		75-130	14		25
Trichlorofluoromethane	76		93		62-150	20		20
1,2-Dichloroethane	97		112		70-130	14		20
1,1,1-Trichloroethane	87		103		67-130	17		20
Bromodichloromethane	98		113		67-130	14		20
trans-1,3-Dichloropropene	89		102		70-130	14		20
cis-1,3-Dichloropropene	99		114		70-130	14		20
1,1-Dichloropropene	86		102		70-130	17		20
Bromoform	85		100		54-136	16		20
1,1,2,2-Tetrachloroethane	96		113		67-130	16		20
Benzene	91		107		70-130	16		25
Toluene	84		96		70-130	13		25
Ethylbenzene	86		100		70-130	15		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG705561-1 WG705561-2								
Chloromethane	79		88		64-130	11		20
Bromomethane	65		77		39-139	17		20
Vinyl chloride	71		86		55-140	19		20
Chloroethane	80		94		55-138	16		20
1,1-Dichloroethene	77		92		61-145	18		25
trans-1,2-Dichloroethene	80		95		70-130	17		20
Trichloroethene	93		110		70-130	17		25
1,2-Dichlorobenzene	89		99		70-130	11		20
1,3-Dichlorobenzene	85		96		70-130	12		20
1,4-Dichlorobenzene	87		98		70-130	12		20
Methyl tert butyl ether	96		110		63-130	14		20
p/m-Xylene	89		103		70-130	15		20
o-Xylene	90		104		70-130	14		20
cis-1,2-Dichloroethene	90		105		70-130	15		20
Dibromomethane	102		118		70-130	15		20
1,4-Dichlorobutane	90		106		70-130	16		20
1,2,3-Trichloropropane	96		112		64-130	15		20
Styrene	92		106		70-130	14		20
Dichlorodifluoromethane	66		80		36-147	19		20
Acetone	112		122		58-148	9		20
Carbon disulfide	75		85		51-130	13		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG705561-1 WG705561-2								
2-Butanone	119		**147**	Q	63-138	**21**	Q	20
Vinyl acetate	104		117		70-130	12		20
4-Methyl-2-pentanone	110		**138**	Q	59-130	**23**	Q	20
2-Hexanone	99		120		57-130	19		20
Ethyl methacrylate	91		106		70-130	15		20
Acrylonitrile	115		**135**	Q	70-130	16		20
Bromochloromethane	100		117		70-130	16		20
Tetrahydrofuran	**138**	Q	**150**	Q	58-130	8		20
2,2-Dichloropropane	85		99		63-133	15		20
1,2-Dibromoethane	94		109		70-130	15		20
1,3-Dichloropropane	95		110		70-130	15		20
1,1,1,2-Tetrachloroethane	90		105		64-130	15		20
Bromobenzene	82		94		70-130	14		20
n-Butylbenzene	88		98		53-136	11		20
sec-Butylbenzene	85		97		70-130	13		20
tert-Butylbenzene	82		96		70-130	16		20
o-Chlorotoluene	87		100		70-130	14		20
p-Chlorotoluene	83		95		70-130	13		20
1,2-Dibromo-3-chloropropane	88		100		41-144	13		20
Hexachlorobutadiene	85		92		63-130	8		20
Isopropylbenzene	79		92		70-130	15		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015
Lab Number: L1415327
Report Date: 07/16/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG705561-1 WG705561-2								
p-Isopropyltoluene	84		97		70-130	14		20
Naphthalene	90		106		70-130	16		20
n-Propylbenzene	82		94		69-130	14		20
1,2,3-Trichlorobenzene	90		102		70-130	13		20
1,2,4-Trichlorobenzene	88		97		70-130	10		20
1,3,5-Trimethylbenzene	83		95		64-130	13		20
1,2,4-Trimethylbenzene	83		95		70-130	13		20
trans-1,4-Dichloro-2-butene	83		96		70-130	15		20
Ethyl ether	87		102		59-134	16		20
Tert-Butyl Alcohol	**152**	Q	**231**	Q	70-130	**41**	Q	20
Tertiary-Amyl Methyl Ether	101		119		66-130	16		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		100		70-130
Toluene-d8	92		92		70-130
4-Bromofluorobenzene	95		95		70-130
Dibromofluoromethane	102		103		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG705561-4 WG705561-5								
Methylene chloride	112		113		70-130	1		20
1,1-Dichloroethane	107		110		70-130	3		20
Chloroform	108		108		70-130	0		20
Carbon tetrachloride	92		105		63-132	13		20
1,2-Dichloropropane	107		111		70-130	4		20
Dibromochloromethane	91		104		63-130	13		20
1,1,2-Trichloroethane	113		116		70-130	3		20
Tetrachloroethene	102		104		70-130	2		20
Chlorobenzene	104		106		75-130	2		25
Trichlorofluoromethane	105		108		62-150	3		20
1,2-Dichloroethane	111		113		70-130	2		20
1,1,1-Trichloroethane	103		107		67-130	4		20
Bromodichloromethane	97		106		67-130	9		20
trans-1,3-Dichloropropene	98		107		70-130	9		20
cis-1,3-Dichloropropene	99		106		70-130	7		20
1,1-Dichloropropene	104		108		70-130	4		20
Bromoform	75		89		54-136	17		20
1,1,2,2-Tetrachloroethane	109		116		67-130	6		20
Benzene	107		109		70-130	2		25
Toluene	105		108		70-130	3		25
Ethylbenzene	104		107		70-130	3		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG705561-4 WG705561-5								
Chloromethane	112		108		64-130	4		20
Bromomethane	54		62		39-139	14		20
Vinyl chloride	97		100		55-140	3		20
Chloroethane	99		102		55-138	3		20
1,1-Dichloroethene	95		101		61-145	6		25
trans-1,2-Dichloroethene	101		103		70-130	2		20
Trichloroethene	105		108		70-130	3		25
1,2-Dichlorobenzene	101		104		70-130	3		20
1,3-Dichlorobenzene	102		104		70-130	2		20
1,4-Dichlorobenzene	101		103		70-130	2		20
Methyl tert butyl ether	101		106		63-130	5		20
p/m-Xylene	109		111		70-130	2		20
o-Xylene	109		112		70-130	3		20
cis-1,2-Dichloroethene	104		106		70-130	2		20
Dibromomethane	106		109		70-130	3		20
1,4-Dichlorobutane	111		117		70-130	5		20
1,2,3-Trichloropropane	115		121		64-130	5		20
Styrene	112		116		70-130	4		20
Dichlorodifluoromethane	106		104		36-147	2		20
Acetone	120		128		58-148	6		20
Carbon disulfide	93		99		51-130	6		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG705561-4 WG705561-5								
2-Butanone	134		**146**	Q	63-138	9		20
Vinyl acetate	117		125		70-130	7		20
4-Methyl-2-pentanone	95		104		59-130	9		20
2-Hexanone	92		102		57-130	10		20
Ethyl methacrylate	93		101		70-130	8		20
Acrylonitrile	119		123		70-130	3		20
Bromochloromethane	113		113		70-130	0		20
Tetrahydrofuran	119		127		58-130	7		20
2,2-Dichloropropane	101		107		63-133	6		20
1,2-Dibromoethane	108		113		70-130	5		20
1,3-Dichloropropane	109		112		70-130	3		20
1,1,1,2-Tetrachloroethane	96		106		64-130	10		20
Bromobenzene	98		100		70-130	2		20
n-Butylbenzene	110		113		53-136	3		20
sec-Butylbenzene	105		110		70-130	5		20
tert-Butylbenzene	102		106		70-130	4		20
o-Chlorotoluene	104		107		70-130	3		20
p-Chlorotoluene	103		106		70-130	3		20
1,2-Dibromo-3-chloropropane	99		106		41-144	7		20
Hexachlorobutadiene	95		98		63-130	3		20
Isopropylbenzene	101		104		70-130	3		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015
Lab Number: L1415327
Report Date: 07/16/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG705561-4 WG705561-5								
p-Isopropyltoluene	105		108		70-130	3		20
Naphthalene	79		87		70-130	10		20
n-Propylbenzene	105		108		69-130	3		20
1,2,3-Trichlorobenzene	90		94		70-130	4		20
1,2,4-Trichlorobenzene	87		90		70-130	3		20
1,3,5-Trimethylbenzene	106		109		64-130	3		20
1,2,4-Trimethylbenzene	106		108		70-130	2		20
trans-1,4-Dichloro-2-butene	97		106		70-130	9		20
Ethyl ether	100		104		59-134	4		20
Tert-Butyl Alcohol	101		127		70-130	**23**	Q	20
Tertiary-Amyl Methyl Ether	98		104		66-130	6		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	101		101		70-130
Toluene-d8	102		102		70-130
4-Bromofluorobenzene	96		97		70-130
Dibromofluoromethane	101		102		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG705417-3 QC Sample: L1415327-01 Client ID: HA14-PB10S (OW)													
1,2-Dibromoethane	ND	0.256	0.241	94		-	-		70-130	-		20	A

SEMIVOLATILES

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID:	L1415327-01	Date Collected:	07/10/14 09:45
Client ID:	HA14-PB10S (OW)	Date Received:	07/10/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D	Extraction Date:	07/11/14 02:00
Analytical Date:	07/11/14 22:08		
Analyst:	PS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	--	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--	1
1,2-Dichlorobenzene	ND		ug/l	2.0	--	1
1,3-Dichlorobenzene	ND		ug/l	2.0	--	1
1,4-Dichlorobenzene	ND		ug/l	2.0	--	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--	1
2,4-Dinitrotoluene	ND		ug/l	5.0	--	1
2,6-Dinitrotoluene	ND		ug/l	5.0	--	1
Azobenzene	ND		ug/l	2.0	--	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--	1
Hexachlorocyclopentadiene	ND		ug/l	20	--	1
Isophorone	ND		ug/l	5.0	--	1
Nitrobenzene	ND		ug/l	2.0	--	1
NDPA/DPA	ND		ug/l	2.0	--	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--	1
Butyl benzyl phthalate	ND		ug/l	5.0	--	1
Di-n-butylphthalate	ND		ug/l	5.0	--	1
Di-n-octylphthalate	ND		ug/l	5.0	--	1
Diethyl phthalate	ND		ug/l	5.0	--	1
Dimethyl phthalate	ND		ug/l	5.0	--	1
Aniline	ND		ug/l	2.0	--	1
4-Chloroaniline	ND		ug/l	5.0	--	1
2-Nitroaniline	ND		ug/l	5.0	--	1
3-Nitroaniline	ND		ug/l	5.0	--	1
4-Nitroaniline	ND		ug/l	5.0	--	1
Dibenzofuran	ND		ug/l	2.0	--	1

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID:	L1415327-01	Date Collected:	07/10/14 09:45
Client ID:	HA14-PB10S (OW)	Date Received:	07/10/14
Sample Location:	Not Specified	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
n-Nitrosodimethylamine	ND		ug/l	2.0	--	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	--	1
p-Chloro-m-cresol	ND		ug/l	2.0	--	1
2-Chlorophenol	ND		ug/l	2.0	--	1
2,4-Dichlorophenol	ND		ug/l	5.0	--	1
2,4-Dimethylphenol	ND		ug/l	5.0	--	1
2-Nitrophenol	ND		ug/l	10	--	1
4-Nitrophenol	ND		ug/l	10	--	1
2,4-Dinitrophenol	ND		ug/l	20	--	1
4,6-Dinitro-o-cresol	ND		ug/l	10	--	1
Phenol	ND		ug/l	5.0	--	1
2-Methylphenol	ND		ug/l	5.0	--	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	--	1
Benzoic Acid	ND		ug/l	50	--	1
Benzyl Alcohol	ND		ug/l	2.0	--	1
Carbazole	ND		ug/l	2.0	--	1
Pyridine	ND		ug/l	5.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	32		21-120
Phenol-d6	21		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	66		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	78		41-149

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID:	L1415327-01	Date Collected:	07/10/14 09:45
Client ID:	HA14-PB10S (OW)	Date Received:	07/10/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	07/11/14 01:59
Analytical Date:	07/12/14 04:22		
Analyst:	AS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	1.0		ug/l	0.20	--	1
2-Chloronaphthalene	ND		ug/l	0.20	--	1
Fluoranthene	ND		ug/l	0.20	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	0.20	--	1
Benzo(a)anthracene	ND		ug/l	0.20	--	1
Benzo(a)pyrene	ND		ug/l	0.20	--	1
Benzo(b)fluoranthene	ND		ug/l	0.20	--	1
Benzo(k)fluoranthene	ND		ug/l	0.20	--	1
Chrysene	ND		ug/l	0.20	--	1
Acenaphthylene	ND		ug/l	0.20	--	1
Anthracene	0.29		ug/l	0.20	--	1
Benzo(ghi)perylene	ND		ug/l	0.20	--	1
Fluorene	0.48		ug/l	0.20	--	1
Phenanthrene	ND		ug/l	0.20	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	--	1
Pyrene	ND		ug/l	0.20	--	1
1-Methylnaphthalene	1.1		ug/l	0.20	--	1
2-Methylnaphthalene	ND		ug/l	0.20	--	1
Pentachlorophenol	ND		ug/l	0.80	--	1
Hexachlorobenzene	ND		ug/l	0.80	--	1
Hexachloroethane	ND		ug/l	0.80	--	1

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID:	L1415327-01	Date Collected:	07/10/14 09:45
Client ID:	HA14-PB10S (OW)	Date Received:	07/10/14
Sample Location:	Not Specified	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	27		21-120
Phenol-d6	18		10-120
Nitrobenzene-d5	58		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	82		10-120
4-Terphenyl-d14	94		41-149

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID:	L1415327-02	Date Collected:	07/10/14 11:40
Client ID:	HA14-PB13S (OW)	Date Received:	07/10/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D	Extraction Date:	07/11/14 02:00
Analytical Date:	07/11/14 22:34		
Analyst:	PS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	--	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--	1
1,2-Dichlorobenzene	ND		ug/l	2.0	--	1
1,3-Dichlorobenzene	ND		ug/l	2.0	--	1
1,4-Dichlorobenzene	ND		ug/l	2.0	--	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--	1
2,4-Dinitrotoluene	ND		ug/l	5.0	--	1
2,6-Dinitrotoluene	ND		ug/l	5.0	--	1
Azobenzene	ND		ug/l	2.0	--	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--	1
Hexachlorocyclopentadiene	ND		ug/l	20	--	1
Isophorone	ND		ug/l	5.0	--	1
Nitrobenzene	ND		ug/l	2.0	--	1
NDPA/DPA	ND		ug/l	2.0	--	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--	1
Butyl benzyl phthalate	ND		ug/l	5.0	--	1
Di-n-butylphthalate	ND		ug/l	5.0	--	1
Di-n-octylphthalate	ND		ug/l	5.0	--	1
Diethyl phthalate	ND		ug/l	5.0	--	1
Dimethyl phthalate	ND		ug/l	5.0	--	1
Aniline	ND		ug/l	2.0	--	1
4-Chloroaniline	ND		ug/l	5.0	--	1
2-Nitroaniline	ND		ug/l	5.0	--	1
3-Nitroaniline	ND		ug/l	5.0	--	1
4-Nitroaniline	ND		ug/l	5.0	--	1
Dibenzofuran	ND		ug/l	2.0	--	1

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID:	L1415327-02	Date Collected:	07/10/14 11:40
Client ID:	HA14-PB13S (OW)	Date Received:	07/10/14
Sample Location:	Not Specified	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
n-Nitrosodimethylamine	ND		ug/l	2.0	--	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	--	1
p-Chloro-m-cresol	ND		ug/l	2.0	--	1
2-Chlorophenol	ND		ug/l	2.0	--	1
2,4-Dichlorophenol	ND		ug/l	5.0	--	1
2,4-Dimethylphenol	ND		ug/l	5.0	--	1
2-Nitrophenol	ND		ug/l	10	--	1
4-Nitrophenol	ND		ug/l	10	--	1
2,4-Dinitrophenol	ND		ug/l	20	--	1
4,6-Dinitro-o-cresol	ND		ug/l	10	--	1
Phenol	ND		ug/l	5.0	--	1
2-Methylphenol	ND		ug/l	5.0	--	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	--	1
Benzoic Acid	ND		ug/l	50	--	1
Benzyl Alcohol	ND		ug/l	2.0	--	1
Carbazole	ND		ug/l	2.0	--	1
Pyridine	ND		ug/l	5.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	29		21-120
Phenol-d6	19		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	61		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	72		41-149

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID:	L1415327-02	Date Collected:	07/10/14 11:40
Client ID:	HA14-PB13S (OW)	Date Received:	07/10/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	07/11/14 01:59
Analytical Date:	07/12/14 04:52		
Analyst:	AS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.20	--	1
2-Chloronaphthalene	ND		ug/l	0.20	--	1
Fluoranthene	ND		ug/l	0.20	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	0.20	--	1
Benzo(a)anthracene	ND		ug/l	0.20	--	1
Benzo(a)pyrene	ND		ug/l	0.20	--	1
Benzo(b)fluoranthene	ND		ug/l	0.20	--	1
Benzo(k)fluoranthene	ND		ug/l	0.20	--	1
Chrysene	ND		ug/l	0.20	--	1
Acenaphthylene	ND		ug/l	0.20	--	1
Anthracene	ND		ug/l	0.20	--	1
Benzo(ghi)perylene	ND		ug/l	0.20	--	1
Fluorene	ND		ug/l	0.20	--	1
Phenanthrene	ND		ug/l	0.20	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	--	1
Pyrene	ND		ug/l	0.20	--	1
1-Methylnaphthalene	ND		ug/l	0.20	--	1
2-Methylnaphthalene	ND		ug/l	0.20	--	1
Pentachlorophenol	ND		ug/l	0.80	--	1
Hexachlorobenzene	ND		ug/l	0.80	--	1
Hexachloroethane	ND		ug/l	0.80	--	1

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID:	L1415327-02	Date Collected:	07/10/14 11:40
Client ID:	HA14-PB13S (OW)	Date Received:	07/10/14
Sample Location:	Not Specified	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	30		21-120
Phenol-d6	20		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	111		41-149

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/11/14 19:35
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 07/10/14 23:48

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG704891-1					
Acenaphthene	ND		ug/l	2.0	--
Benzidine	ND		ug/l	20	--
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Hexachlorobenzene	ND		ug/l	2.0	--
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--
2-Chloronaphthalene	ND		ug/l	2.0	--
1,2-Dichlorobenzene	ND		ug/l	2.0	--
1,3-Dichlorobenzene	ND		ug/l	2.0	--
1,4-Dichlorobenzene	ND		ug/l	2.0	--
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--
2,4-Dinitrotoluene	ND		ug/l	5.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene	ND		ug/l	2.0	--
Fluoranthene	ND		ug/l	2.0	--
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--
Hexachlorobutadiene	ND		ug/l	2.0	--
Hexachlorocyclopentadiene	ND		ug/l	20	--
Hexachloroethane	ND		ug/l	2.0	--
Isophorone	ND		ug/l	5.0	--
Naphthalene	ND		ug/l	2.0	--
Nitrobenzene	ND		ug/l	2.0	--
NDPA/DPA	ND		ug/l	2.0	--
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	--
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/11/14 19:35
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 07/10/14 23:48

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG704891-1					
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--
Dimethyl phthalate	ND		ug/l	5.0	--
Benzo(a)anthracene	ND		ug/l	2.0	--
Benzo(a)pyrene	ND		ug/l	2.0	--
Benzo(b)fluoranthene	ND		ug/l	2.0	--
Benzo(k)fluoranthene	ND		ug/l	2.0	--
Chrysene	ND		ug/l	2.0	--
Acenaphthylene	ND		ug/l	2.0	--
Anthracene	ND		ug/l	2.0	--
Benzo(ghi)perylene	ND		ug/l	2.0	--
Fluorene	ND		ug/l	2.0	--
Phenanthrene	ND		ug/l	2.0	--
Dibenzo(a,h)anthracene	ND		ug/l	2.0	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	--
Pyrene	ND		ug/l	2.0	--
Biphenyl	ND		ug/l	2.0	--
Aniline	ND		ug/l	2.0	--
4-Chloroaniline	ND		ug/l	5.0	--
1-Methylnaphthalene	ND		ug/l	2.0	--
2-Nitroaniline	ND		ug/l	5.0	--
3-Nitroaniline	ND		ug/l	5.0	--
4-Nitroaniline	ND		ug/l	5.0	--
Dibenzofuran	ND		ug/l	2.0	--
2-Methylnaphthalene	ND		ug/l	2.0	--
n-Nitrosodimethylamine	ND		ug/l	2.0	--
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
p-Chloro-m-cresol	ND		ug/l	2.0	--
2-Chlorophenol	ND		ug/l	2.0	--

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/11/14 19:35
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 07/10/14 23:48

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG704891-1					
2,4-Dichlorophenol	ND		ug/l	5.0	--
2,4-Dimethylphenol	ND		ug/l	5.0	--
2-Nitrophenol	ND		ug/l	10	--
4-Nitrophenol	ND		ug/l	10	--
2,4-Dinitrophenol	ND		ug/l	20	--
4,6-Dinitro-o-cresol	ND		ug/l	10	--
Pentachlorophenol	ND		ug/l	10	--
Phenol	ND		ug/l	5.0	--
2-Methylphenol	ND		ug/l	5.0	--
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--
2,4,5-Trichlorophenol	ND		ug/l	5.0	--
Benzoic Acid	ND		ug/l	50	--
Benzyl Alcohol	ND		ug/l	2.0	--
Carbazole	ND		ug/l	2.0	--
Pyridine	ND		ug/l	5.0	--

Tentatively Identified Compounds

Unknown	8.2	J	ug/l
Unknown	45	J	ug/l
Unknown	5.2	J	ug/l

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/11/14 19:35
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 07/10/14 23:48

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG704891-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	28		21-120
Phenol-d6	17		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	54		15-120
2,4,6-Tribromophenol	59		10-120
4-Terphenyl-d14	63		41-149

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/12/14 02:53
Analyst: AS

Extraction Method: EPA 3510C
Extraction Date: 07/11/14 01:59

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG704914-1					
Acenaphthene	ND		ug/l	0.20	--
2-Chloronaphthalene	ND		ug/l	0.20	--
Fluoranthene	ND		ug/l	0.20	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	0.20	--
Benzo(a)anthracene	ND		ug/l	0.20	--
Benzo(a)pyrene	ND		ug/l	0.20	--
Benzo(b)fluoranthene	ND		ug/l	0.20	--
Benzo(k)fluoranthene	ND		ug/l	0.20	--
Chrysene	ND		ug/l	0.20	--
Acenaphthylene	ND		ug/l	0.20	--
Anthracene	ND		ug/l	0.20	--
Benzo(ghi)perylene	ND		ug/l	0.20	--
Fluorene	ND		ug/l	0.20	--
Phenanthrene	ND		ug/l	0.20	--
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	--
Pyrene	ND		ug/l	0.20	--
1-Methylnaphthalene	ND		ug/l	0.20	--
2-Methylnaphthalene	ND		ug/l	0.20	--
Pentachlorophenol	ND		ug/l	0.80	--
Hexachlorobenzene	ND		ug/l	0.80	--
Hexachloroethane	ND		ug/l	0.80	--

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/12/14 02:53
Analyst: AS

Extraction Method: EPA 3510C
Extraction Date: 07/11/14 01:59

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG704914-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	30		21-120
Phenol-d6	20		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	69		10-120
4-Terphenyl-d14	72		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG704891-2 WG704891-3								
Acenaphthene	70		62		37-111	12		30
Benzidine	20		34		10-75	**52**	Q	30
1,2,4-Trichlorobenzene	53		43		39-98	21		30
Hexachlorobenzene	72		66		40-140	9		30
Bis(2-chloroethyl)ether	65		56		40-140	15		30
2-Chloronaphthalene	62		54		40-140	14		30
1,2-Dichlorobenzene	53		42		40-140	23		30
1,3-Dichlorobenzene	52		41		40-140	24		30
1,4-Dichlorobenzene	52		41		36-97	24		30
3,3'-Dichlorobenzidine	74		70		40-140	6		30
2,4-Dinitrotoluene	88		80		24-96	10		30
2,6-Dinitrotoluene	85		80		40-140	6		30
Azobenzene	81		74		40-140	9		30
Fluoranthene	80		73		40-140	9		30
4-Chlorophenyl phenyl ether	72		64		40-140	12		30
4-Bromophenyl phenyl ether	75		67		40-140	11		30
Bis(2-chloroisopropyl)ether	65		55		40-140	17		30
Bis(2-chloroethoxy)methane	68		57		40-140	18		30
Hexachlorobutadiene	49		**38**	Q	40-140	25		30
Hexachlorocyclopentadiene	44		**36**	Q	40-140	20		30
Hexachloroethane	50		40		40-140	22		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG704891-2 WG704891-3								
Isophorone	69		60		40-140	14		30
Naphthalene	60		50		40-140	18		30
Nitrobenzene	71		61		40-140	15		30
NDPA/DPA	78		72		40-140	8		30
n-Nitrosodi-n-propylamine	72		62		29-132	15		30
Bis(2-ethylhexyl)phthalate	102		94		40-140	8		30
Butyl benzyl phthalate	96		84		40-140	13		30
Di-n-butylphthalate	89		82		40-140	8		30
Di-n-octylphthalate	103		94		40-140	9		30
Diethyl phthalate	82		75		40-140	9		30
Dimethyl phthalate	77		71		40-140	8		30
Benzo(a)anthracene	83		77		40-140	8		30
Benzo(a)pyrene	83		77		40-140	8		30
Benzo(b)fluoranthene	83		75		40-140	10		30
Benzo(k)fluoranthene	80		77		40-140	4		30
Chrysene	83		76		40-140	9		30
Acenaphthylene	70		62		45-123	12		30
Anthracene	83		77		40-140	8		30
Benzo(ghi)perylene	82		74		40-140	10		30
Fluorene	74		66		40-140	11		30
Phenanthrene	80		74		40-140	8		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG704891-2 WG704891-3								
Dibenzo(a,h)anthracene	82		74		40-140	10		30
Indeno(1,2,3-cd)pyrene	82		75		40-140	9		30
Pyrene	80		72		26-127	11		30
Biphenyl	67		57		40-140	16		30
Aniline	**29**	Q	**28**	Q	40-140	4		30
4-Chloroaniline	57		52		40-140	9		30
1-Methylnaphthalene	63		52		41-103	19		30
2-Nitroaniline	88		82		52-143	7		30
3-Nitroaniline	68		65		25-145	5		30
4-Nitroaniline	82		74		51-143	10		30
Dibenzofuran	72		64		40-140	12		30
2-Methylnaphthalene	59		50		40-140	17		30
n-Nitrosodimethylamine	34		29		22-74	16		30
2,4,6-Trichlorophenol	73		64		30-130	13		30
p-Chloro-m-cresol	71		65		23-97	9		30
2-Chlorophenol	60		49		27-123	20		30
2,4-Dichlorophenol	68		58		30-130	16		30
2,4-Dimethylphenol	72		62		30-130	15		30
2-Nitrophenol	70		60		30-130	15		30
4-Nitrophenol	44		40		10-80	10		30
2,4-Dinitrophenol	82		72		20-130	13		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015
Lab Number: L1415327
Report Date: 07/16/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG704891-2 WG704891-3								
4,6-Dinitro-o-cresol	91		85		20-164	7		30
Pentachlorophenol	84		75		9-103	11		30
Phenol	25		21		12-110	17		30
2-Methylphenol	51		44		30-130	15		30
3-Methylphenol/4-Methylphenol	47		40		30-130	16		30
2,4,5-Trichlorophenol	73		67		30-130	9		30
Benzoic Acid	23		16		10-164	**36**	Q	30
Benzyl Alcohol	52		44		26-116	17		30
Carbazole	84		77		55-144	9		30
Pyridine	24		23		10-66	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	34		28		21-120
Phenol-d6	22		19		10-120
Nitrobenzene-d5	71		62		23-120
2-Fluorobiphenyl	66		58		15-120
2,4,6-Tribromophenol	75		70		10-120
4-Terphenyl-d14	75		67		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG704914-2 WG704914-3								
Acenaphthene	71		60		37-111	17		40
2-Chloronaphthalene	66		60		40-140	10		40
Fluoranthene	93		82		40-140	13		40
Hexachlorobutadiene	57		52		40-140	9		40
Naphthalene	66		60		40-140	10		40
Benzo(a)anthracene	90		80		40-140	12		40
Benzo(a)pyrene	86		78		40-140	10		40
Benzo(b)fluoranthene	86		77		40-140	11		40
Benzo(k)fluoranthene	82		76		40-140	8		40
Chrysene	85		76		40-140	11		40
Acenaphthylene	75		70		40-140	7		40
Anthracene	86		74		40-140	15		40
Benzo(ghi)perylene	72		64		40-140	12		40
Fluorene	78		68		40-140	14		40
Phenanthrene	79		70		40-140	12		40
Dibenzo(a,h)anthracene	82		73		40-140	12		40
Indeno(1,2,3-cd)Pyrene	80		72		40-140	11		40
Pyrene	92		82		26-127	11		40
1-Methylnaphthalene	66		61		40-140	8		40
2-Methylnaphthalene	70		64		40-140	9		40
Pentachlorophenol	33		33		9-103	0		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG704914-2 WG704914-3								
Hexachlorobenzene	80		70		40-140	13		40
Hexachloroethane	65		56		40-140	15		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	36		32		21-120
Phenol-d6	25		23		10-120
Nitrobenzene-d5	72		66		23-120
2-Fluorobiphenyl	70		65		15-120
2,4,6-Tribromophenol	86		77		10-120
4-Terphenyl-d14	92		84		41-149

PCBS

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID:	L1415327-01	Date Collected:	07/10/14 09:45
Client ID:	HA14-PB10S (OW)	Date Received:	07/10/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 608
Analytical Method:	5,608	Extraction Date:	07/11/14 16:11
Analytical Date:	07/13/14 19:55	Cleanup Method:	EPA 3665A
Analyst:	JW	Cleanup Date:	07/13/14
		Cleanup Method:	EPA 3660B
		Cleanup Date:	07/13/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.200	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	85		30-150	A

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID:	L1415327-02	Date Collected:	07/10/14 11:40
Client ID:	HA14-PB13S (OW)	Date Received:	07/10/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 608
Analytical Method:	5,608	Extraction Date:	07/11/14 16:11
Analytical Date:	07/13/14 20:09	Cleanup Method:	EPA 3665A
Analyst:	JW	Cleanup Date:	07/13/14
		Cleanup Method:	EPA 3660B
		Cleanup Date:	07/13/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.200	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	81		30-150	A

Project Name: PROPOSED PARTNERS HEALTHCARE

Project Number: 40798-015

Lab Number: L1415327

Report Date: 07/16/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 07/13/14 20:37
Analyst: JW

Extraction Method: EPA 608
Extraction Date: 07/11/14 16:11
Cleanup Method: EPA 3665A
Cleanup Date: 07/13/14
Cleanup Method: EPA 3660B
Cleanup Date: 07/13/14

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-02 Batch: WG705140-1						
Aroclor 1016	ND		ug/l	0.250	--	A
Aroclor 1221	ND		ug/l	0.250	--	A
Aroclor 1232	ND		ug/l	0.250	--	A
Aroclor 1242	ND		ug/l	0.250	--	A
Aroclor 1248	ND		ug/l	0.250	--	A
Aroclor 1254	ND		ug/l	0.250	--	A
Aroclor 1260	ND		ug/l	0.200	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	A
Decachlorobiphenyl	92		30-150	A

Matrix Spike Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015
Lab Number: L1415327
Report Date: 07/16/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02 (OW) QC Batch ID: WG705140-3 QC Sample: L1415327-02 Client ID: HA14-PB13S													
Aroclor 1016	ND	1	0.898	90		-	-		40-140	-		50	A
Aroclor 1260	ND	1	0.916	92		-	-		40-140	-		50	A

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86				30-150	A
Decachlorobiphenyl	92				30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE

Project Number: 40798-015

Lab Number: L1415327

Report Date: 07/16/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG705140-2									
Aroclor 1016	70		-		40-140	-		50	A
Aroclor 1260	75		-		40-140	-		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69				30-150	A
Decachlorobiphenyl	91				30-150	A

Lab Duplicate Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits	
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG705140-4 QC Sample: L1415327-01 Client ID: HA14-PB10S (OW)							
Aroclor 1016	ND	ND	ug/l	NC		50	A
Aroclor 1221	ND	ND	ug/l	NC		50	A
Aroclor 1232	ND	ND	ug/l	NC		50	A
Aroclor 1242	ND	ND	ug/l	NC		50	A
Aroclor 1248	ND	ND	ug/l	NC		50	A
Aroclor 1254	ND	ND	ug/l	NC		50	A
Aroclor 1260	ND	ND	ug/l	NC		50	A

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		77		30-150	A
Decachlorobiphenyl	85		89		30-150	A

METALS

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID: L1415327-01 Date Collected: 07/10/14 09:45

Client ID: HA14-PB10S (OW) Date Received: 07/10/14

Sample Location: Not Specified Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Antimony, Total	ND		mg/l	0.00200	--	1	07/11/14 16:22	07/15/14 14:45	EPA 3005A	1,6020A	KL
Arsenic, Total	0.00392		mg/l	0.00050	--	1	07/11/14 16:22	07/15/14 14:45	EPA 3005A	1,6020A	KL
Cadmium, Total	ND		mg/l	0.00020	--	1	07/11/14 16:22	07/15/14 14:45	EPA 3005A	1,6020A	KL
Chromium, Total	ND		mg/l	0.00100	--	1	07/11/14 16:22	07/15/14 14:45	EPA 3005A	1,6020A	KL
Copper, Total	ND		mg/l	0.00100	--	1	07/11/14 16:22	07/15/14 14:45	EPA 3005A	1,6020A	KL
Iron, Total	9.5		mg/l	0.05	--	1	07/14/14 08:14	07/14/14 17:20	EPA 3005A	19,200.7	JH
Lead, Total	ND		mg/l	0.00050	--	1	07/11/14 16:22	07/15/14 14:45	EPA 3005A	1,6020A	KL
Mercury, Total	ND		mg/l	0.0002	--	1	07/11/14 15:24	07/12/14 10:25	EPA 245.1	3,245.1	AK
Nickel, Total	0.00148		mg/l	0.00050	--	1	07/11/14 16:22	07/15/14 14:45	EPA 3005A	1,6020A	KL
Selenium, Total	ND		mg/l	0.00500	--	1	07/11/14 16:22	07/15/14 14:45	EPA 3005A	1,6020A	KL
Silver, Total	ND		mg/l	0.00040	--	1	07/11/14 16:22	07/15/14 14:45	EPA 3005A	1,6020A	KL
Zinc, Total	0.01435		mg/l	0.01000	--	1	07/11/14 16:22	07/15/14 14:45	EPA 3005A	1,6020A	KL

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

SAMPLE RESULTS

Lab ID: L1415327-02 Date Collected: 07/10/14 11:40

Client ID: HA14-PB13S (OW) Date Received: 07/10/14

Sample Location: Not Specified Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Antimony, Total	ND		mg/l	0.00200	--	1	07/11/14 16:22	07/15/14 14:31	EPA 3005A	1,6020A	KL
Arsenic, Total	0.01488		mg/l	0.00050	--	1	07/11/14 16:22	07/15/14 14:31	EPA 3005A	1,6020A	KL
Cadmium, Total	ND		mg/l	0.00020	--	1	07/11/14 16:22	07/15/14 14:31	EPA 3005A	1,6020A	KL
Chromium, Total	ND		mg/l	0.00100	--	1	07/11/14 16:22	07/15/14 14:31	EPA 3005A	1,6020A	KL
Copper, Total	0.00140		mg/l	0.00100	--	1	07/11/14 16:22	07/15/14 14:31	EPA 3005A	1,6020A	KL
Iron, Total	2.0		mg/l	0.05	--	1	07/14/14 08:14	07/14/14 12:34	EPA 3005A	19,200.7	JH
Lead, Total	0.00059		mg/l	0.00050	--	1	07/11/14 16:22	07/15/14 14:31	EPA 3005A	1,6020A	KL
Mercury, Total	ND		mg/l	0.0002	--	1	07/11/14 15:24	07/12/14 13:24	EPA 245.1	3,245.1	AK
Nickel, Total	0.02445		mg/l	0.00050	--	1	07/11/14 16:22	07/15/14 14:31	EPA 3005A	1,6020A	KL
Selenium, Total	ND		mg/l	0.00500	--	1	07/11/14 16:22	07/15/14 14:31	EPA 3005A	1,6020A	KL
Silver, Total	ND		mg/l	0.00040	--	1	07/11/14 16:22	07/15/14 14:31	EPA 3005A	1,6020A	KL
Zinc, Total	0.02746		mg/l	0.01000	--	1	07/11/14 16:22	07/15/14 14:31	EPA 3005A	1,6020A	KL

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-02 Batch: WG705121-1										
Mercury, Total	ND		mg/l	0.0002	--	1	07/11/14 15:24	07/12/14 10:22	3,245.1	AK

Prep Information

Digestion Method: EPA 245.1

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-02 Batch: WG705128-1										
Antimony, Total	ND		mg/l	0.00050	--	1	07/11/14 16:22	07/15/14 14:13	1,6020A	KL
Arsenic, Total	ND		mg/l	0.00050	--	1	07/11/14 16:22	07/15/14 14:13	1,6020A	KL
Cadmium, Total	ND		mg/l	0.00020	--	1	07/11/14 16:22	07/15/14 14:13	1,6020A	KL
Chromium, Total	ND		mg/l	0.00100	--	1	07/11/14 16:22	07/15/14 14:13	1,6020A	KL
Copper, Total	ND		mg/l	0.00100	--	1	07/11/14 16:22	07/15/14 14:13	1,6020A	KL
Lead, Total	ND		mg/l	0.00050	--	1	07/11/14 16:22	07/15/14 14:13	1,6020A	KL
Nickel, Total	ND		mg/l	0.00050	--	1	07/11/14 16:22	07/15/14 14:13	1,6020A	KL
Selenium, Total	ND		mg/l	0.00500	--	1	07/11/14 16:22	07/15/14 14:13	1,6020A	KL
Silver, Total	ND		mg/l	0.00040	--	1	07/11/14 16:22	07/15/14 14:13	1,6020A	KL
Zinc, Total	ND		mg/l	0.01000	--	1	07/11/14 16:22	07/15/14 14:13	1,6020A	KL

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-02 Batch: WG705424-1										
Iron, Total	ND		mg/l	0.05	--	1	07/14/14 08:14	07/14/14 12:26	19,200.7	JH

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-02 Batch: WG705121-2								
Mercury, Total	107		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01-02 Batch: WG705128-2								
Antimony, Total	91		-		80-120	-		
Arsenic, Total	100		-		80-120	-		
Cadmium, Total	112		-		80-120	-		
Chromium, Total	99		-		80-120	-		
Copper, Total	111		-		80-120	-		
Lead, Total	107		-		80-120	-		
Nickel, Total	105		-		80-120	-		
Selenium, Total	107		-		80-120	-		
Silver, Total	110		-		80-120	-		
Zinc, Total	106		-		80-120	-		
Total Metals - Westborough Lab Associated sample(s): 01-02 Batch: WG705424-2								
Iron, Total	100		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015
Lab Number: L1415327
Report Date: 07/16/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG705121-4 QC Sample: L1415327-01 Client ID: HA14-PB10S (OW)												
Mercury, Total	ND	0.005	0.0047	95		-	-		70-130	-		20
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG705128-4 QC Sample: L1415327-02 Client ID: HA14-PB13S (OW)												
Antimony, Total	ND	0.5	0.5181	104		-	-		75-125	-		20
Arsenic, Total	0.01488	0.12	0.1428	107		-	-		75-125	-		20
Cadmium, Total	ND	0.051	0.06014	118		-	-		75-125	-		20
Chromium, Total	ND	0.2	0.2087	104		-	-		75-125	-		20
Copper, Total	0.00140	0.25	0.2662	106		-	-		75-125	-		20
Lead, Total	0.00059	0.51	0.5552	109		-	-		75-125	-		20
Nickel, Total	0.02445	0.5	0.5485	105		-	-		75-125	-		20
Selenium, Total	ND	0.12	0.125	104		-	-		75-125	-		20
Silver, Total	ND	0.05	0.05324	106		-	-		75-125	-		20
Zinc, Total	0.02746	0.5	0.5911	113		-	-		75-125	-		20
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG705424-4 QC Sample: L1415327-02 Client ID: HA14-PB13S (OW)												
Iron, Total	2.0	1	3.0	100		-	-		75-125	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG705121-3 QC Sample: L1415327-01 Client ID: HA14-PB10S (OW)						
Mercury, Total	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG705128-3 QC Sample: L1415327-02 Client ID: HA14-PB13S (OW)						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	0.01488	0.01329	mg/l	11		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	ND	ND	mg/l	NC		20
Copper, Total	0.00140	0.00116	mg/l	19		20
Lead, Total	0.00059	0.00106	mg/l	**57**	Q	20
Nickel, Total	0.02445	0.02262	mg/l	8		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Zinc, Total	0.02746	0.02558	mg/l	7		20
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG705424-3 QC Sample: L1415327-02 Client ID: HA14-PB13S (OW)						
Iron, Total	2.0	2.0	mg/l	0		20

INORGANICS
&
MISCELLANEOUS

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

SAMPLE RESULTS

Lab ID: L1415327-01
Client ID: HA14-PB10S (OW)
Sample Location: Not Specified
Matrix: Water

Date Collected: 07/10/14 09:45
Date Received: 07/10/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	14.		mg/l	5.0	NA	1	-	07/11/14 15:50	30,2540D	DW
Cyanide, Total	ND		mg/l	0.005	--	1	07/11/14 10:50	07/11/14 17:26	30,4500CN-CE	JO
Cyanide, Amenable	ND		mg/l	0.010	--	2	07/11/14 10:50	07/11/14 17:12	30,4500CN-G	SP
Cyanide, Physiologically Available	ND		mg/l	0.005	--	1	07/16/14 10:15	07/16/14 12:52	64,9014(M)	JO
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	07/10/14 22:00	30,4500CL-D	JA
Phenolics, Total	ND		mg/l	0.03	--	1	07/15/14 12:45	07/15/14 16:47	4,420.1	MP
Chromium, Hexavalent	ND		mg/l	0.010	--	1	07/10/14 21:00	07/10/14 21:37	30,3500CR-D	EL
Anions by Ion Chromatography - Westborough Lab										
Chloride	229.		mg/l	5.00	--	10	-	07/12/14 00:28	44,300.0	JT

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

SAMPLE RESULTS

Lab ID: L1415327-02
Client ID: HA14-PB13S (OW)
Sample Location: Not Specified
Matrix: Water

Date Collected: 07/10/14 11:40
Date Received: 07/10/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	6.1		mg/l	5.0	NA	1	-	07/11/14 15:50	30,2540D	DW
Cyanide, Total	ND		mg/l	0.005	--	1	07/11/14 10:50	07/11/14 17:27	30,4500CN-CE	JO
Cyanide, Amenable	ND		mg/l	0.010	--	2	07/11/14 10:50	07/11/14 17:12	30,4500CN-G	SP
Cyanide, Physiologically Available	ND		mg/l	0.005	--	1	07/16/14 10:15	07/16/14 12:56	64,9014(M)	JO
Chlorine, Total Residual	2.6		mg/l	0.10	--	5	-	07/10/14 22:00	30,4500CL-D	JA
Phenolics, Total	ND		mg/l	0.03	--	1	07/15/14 12:45	07/15/14 16:48	4,420.1	MP
Chromium, Hexavalent	ND		mg/l	0.010	--	1	07/10/14 21:00	07/10/14 21:37	30,3500CR-D	EL
Anions by Ion Chromatography - Westborough Lab										
Chloride	36.5		mg/l	5.00	--	10	-	07/12/14 00:40	44,300.0	JT

Project Name: PROPOSED PARTNERS HEALTHCAR **Lab Number:** L1415327

Project Number: 40798-015 **Report Date:** 07/16/14

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG704865-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	07/10/14 21:00	07/10/14 21:36	30,3500CR-D	EL
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG704870-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	07/10/14 22:00	30,4500CL-D	JA
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG704978-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	07/11/14 15:50	30,2540D	DW
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG704997-1										
Cyanide, Amenable	ND		mg/l	0.010	--	2	07/11/14 10:50	07/11/14 17:12	30,4500CN-G	SP
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG705002-1										
Cyanide, Total	ND		mg/l	0.005	--	1	07/11/14 10:50	07/11/14 17:13	30,4500CN-CE	JO
Anions by Ion Chromatography - Westborough Lab for sample(s): 01-02 Batch: WG705398-1										
Chloride	ND		mg/l	0.500	--	1	-	07/11/14 18:52	44,300.0	JT
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG705500-1										
Phenolics, Total	ND		mg/l	0.03	--	1	07/15/14 12:45	07/15/14 16:20	4,420.1	MP
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG705567-1										
Cyanide, Physiologically Available	ND		mg/l	0.005	--	1	07/16/14 10:15	07/16/14 12:48	64,9014(M)	JO

Lab Control Sample Analysis

Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE

Project Number: 40798-015

Lab Number: L1415327

Report Date: 07/16/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG704865-2								
Chromium, Hexavalent	100		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG704870-2								
Chlorine, Total Residual	97		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG704997-2								
Cyanide, Amenable	100		-			-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG705002-2								
Cyanide, Total	100		-		90-110	-		
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-02 Batch: WG705398-2								
Chloride	101		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG705500-2								
Phenolics, Total	109		-		70-130	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG705567-2 WG705567-3								
Cyanide, Physiologically Available	96		94		80-120	2		

Lab Control Sample Analysis

Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE

Project Number: 40798-015

Lab Number: L1415327

Report Date: 07/16/14

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab NEGATIVE LCS Associated sample(s): 01-02 Batch: WG705567-4					
Cyanide, Physiologically Available	**5**	-	0-10	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG704865-4 QC Sample: L1415327-02 Client ID: HA14-PB13S (OW)												
Chromium, Hexavalent	ND	0.1	0.101	101		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG705002-3 QC Sample: L1415282-02 Client ID: MS Sample												
Cyanide, Total	0.034	0.2	0.233	99		-	-		90-110	-		30
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG705398-3 QC Sample: L1413384-05 Client ID: MS Sample												
Chloride	23600	2000	24700	58		-	-		40-151	-		18
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG705500-4 QC Sample: L1415497-02 Client ID: MS Sample												
Phenolics, Total	ND	0.4	0.47	118		-	-		70-130	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG705567-5 QC Sample: L1415327-01 Client ID: HA14-PB10S (OW)												
Cyanide, Physiologically Available	ND	0.2	0.190	95		-	-		75-125	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG704865-3 QC Sample: L1415327-01 Client ID: HA14-PB10S (OW)						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG704870-3 QC Sample: L1415327-01 Client ID: HA14-PB10S (OW)						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG704978-2 QC Sample: L1415166-01 Client ID: DUP Sample						
Solids, Total Suspended	29	42	mg/l	**37**	Q	29
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG704997-3 QC Sample: L1415327-01 Client ID: HA14-PB10S (OW)						
Cyanide, Amenable	ND	ND	mg/l	NC		
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG705002-4 QC Sample: L1415282-02 Client ID: DUP Sample						
Cyanide, Total	0.034	0.024	mg/l	**32**	Q	30
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG705398-4 QC Sample: L1413384-05 Client ID: DUP Sample						
Chloride	23600	23500	mg/l	0		18
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG705500-3 QC Sample: L1415497-02 Client ID: DUP Sample						
Phenolics, Total	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG705567-6 QC Sample: L1415327-01 Client ID: HA14-PB10S (OW)						
Cyanide, Physiologically Available	ND	ND	mg/l	NC		20

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information	Custody Seal
Cooler	
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1415327-01A	Vial HCl preserved	B	N/A	3.9	Y	Absent	8260-SIM(14),8260(14)
L1415327-01B	Vial HCl preserved	B	N/A	3.9	Y	Absent	8260-SIM(14),8260(14)
L1415327-01C	Vial HCl preserved	B	N/A	3.9	Y	Absent	8260-SIM(14),8260(14)
L1415327-01D	Vial Na2S2O3 preserved	B	N/A	3.9	Y	Absent	504(14)
L1415327-01E	Vial Na2S2O3 preserved	B	N/A	3.9	Y	Absent	504(14)
L1415327-01F	Plastic 250ml HNO3 preserved	B	<2	3.9	Y	Absent	SE-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),PB-6020T(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180)
L1415327-01G	Plastic 250ml HNO3 preserved	B	<2	3.9	Y	Absent	HOLD-METAL(180)
L1415327-01H	Plastic 250ml NaOH preserved	B	>12	3.9	Y	Absent	TCN-4500(14)
L1415327-01I	Plastic 250ml NaOH preserved	B	>12	3.9	Y	Absent	ACN-4500(14),PACN(14)
L1415327-01J	Plastic 500ml unpreserved	A	8	2.3	Y	Absent	CL-300(28),TRC-4500(1)
L1415327-01K	Plastic 500ml unpreserved	A	8	2.3	Y	Absent	HEXCR-3500(1)
L1415327-01L	Plastic 1000ml unpreserved	A	8	2.3	Y	Absent	TSS-2540(7)
L1415327-01M	Amber 500ml H2SO4 preserved	A	<2	2.3	Y	Absent	TPHENOL-420(28)
L1415327-01O	Amber 1000ml unpreserved	A	8	2.3	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1415327-01P	Amber 1000ml unpreserved	A	8	2.3	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1415327-01Q	Amber 1000ml Na2S2O3	A	8	2.3	Y	Absent	PCB-608(7)
L1415327-01R	Amber 1000ml Na2S2O3	A	8	2.3	Y	Absent	PCB-608(7)
L1415327-01S	Amber 1000ml unpreserved	A	8	2.3	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1415327-01T	Amber 1000ml unpreserved	A	8	2.3	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1415327-02A	Vial HCl preserved	B	N/A	3.9	Y	Absent	8260-SIM(14),8260(14)
L1415327-02B	Vial HCl preserved	B	N/A	3.9	Y	Absent	8260-SIM(14),8260(14)
L1415327-02C	Vial HCl preserved	B	N/A	3.9	Y	Absent	8260-SIM(14),8260(14)

*Values in parentheses indicate holding time in days

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415327
Report Date: 07/16/14

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1415327-02D	Vial Na2S2O3 preserved	B	N/A	3.9	Y	Absent	504(14)
L1415327-02E	Vial Na2S2O3 preserved	B	N/A	3.9	Y	Absent	504(14)
L1415327-02F	Plastic 250ml HNO3 preserved	B	<2	3.9	Y	Absent	SE-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),PB-6020T(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180)
L1415327-02G	Plastic 250ml HNO3 preserved	B	<2	3.9	Y	Absent	HOLD-METAL(180)
L1415327-02H	Plastic 250ml NaOH preserved	B	>12	3.9	Y	Absent	TCN-4500(14)
L1415327-02I	Plastic 250ml NaOH preserved	B	>12	3.9	Y	Absent	ACN-4500(14),PACN(14)
L1415327-02J	Plastic 500ml unpreserved	A	8	2.3	Y	Absent	CL-300(28),TRC-4500(1)
L1415327-02K	Plastic 500ml unpreserved	A	8	2.3	Y	Absent	HEXCR-3500(1)
L1415327-02L	Plastic 1000ml unpreserved	B	8	3.9	Y	Absent	TSS-2540(7)
L1415327-02M	Amber 1000ml H2SO4 preserved	B	<2	3.9	Y	Absent	TPHENOL-420(28)
L1415327-02O	Amber 1000ml unpreserved	B	8	3.9	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1415327-02P	Amber 1000ml unpreserved	B	8	3.9	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1415327-02Q	Amber 1000ml Na2S2O3	A	8	2.3	Y	Absent	PCB-608(7)
L1415327-02R	Amber 1000ml Na2S2O3	A	8	2.3	Y	Absent	PCB-608(7)
L1415327-02S	Amber 1000ml unpreserved	B	8	3.9	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1415327-02T	Amber 1000ml unpreserved	B	8	3.9	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1415327-03A	Vial HCl preserved	B	N/A	3.9	Y	Absent	HOLD(14)
L1415327-03B	Vial Na2S2O3 preserved	B	N/A	3.9	Y	Absent	HOLD(14)
L1415327-03C	Vial Na2S2O3 preserved	B	N/A	3.9	Y	Absent	HOLD(14)

*Values in parentheses indicate holding time in days

Project Name:	PROPOSED PARTNERS HEALTHCARE	**Lab Number:**	L1415327
Project Number:	40798-015	**Report Date:**	07/16/14

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

Report Format: Data Usability Report

Project Name:	PROPOSED PARTNERS HEALTHCARE	**Lab Number:**	L1415327
Project Number:	40798-015	**Report Date:**	07/16/14

Data Qualifiers

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	PROPOSED PARTNERS HEALTHCARE	**Lab Number:**	L1415327
Project Number:	40798-015	**Report Date:**	07/16/14

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

4 Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020. Revised March 1983.

5 Methods for the Organic Chemical Analysis of Municipal and Industrial Wastewater. Appendix A, Part 136, 40 CFR (Code of Federal Regulations).

14 Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water. EPA/600/4-88/039, Revised July 1991.

19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

64 Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). August 2004.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

Last revised April 15, 2014

The following analytes are not included in our NELAP Scope of Accreditation:

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F,**
EPA 353.2: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

HALEY & ALDRICH

Haley & Aldrich, Inc.
465 Medford St.,
Suite 2200,
Boston, MA 02129-1402

CHAIN OF CUSTODY RECORD

L1415327

Phone (617) 886-7400
Fax (617) 886-7600

Page 1 of 1

H&A FILE NO.	40798-015	LABORATORY	ALPHA ANALYTICAL
PROJECT NAME	Proposed Partners HealthCare Administrative Campus	ADDRESS	WESTBOROUGH, MA
H&A CONTACT	Casey Bartlett, 617-886-7476, CBartlett@HaleyAldrich.com	CONTACT	Gina Hall, 508-439-5155, GBartolomeo@AlphaLab.com

DELIVERY DATE 7/10/14
TURNAROUND TIME 5 Day
PROJECT MANAGER Iliana Alvarado

Sample No.	Date	Time	Depth	Type	1. VOCs 8260C-SIM	2. SVOCs 8270/8270-SIM	3. PCBs 608	4. TSS 160.2	5. EDB 504.1	6. PAC, ACN	7. Total Phenol 420.1	8. Total Metals	9. TRC 330.1	10. TCN 335.2	11. Hex Cr SM 3500	13. Chloride-300	14. Dissolved Metals		Number of Containers
HA14-PB10S (OW)	7/10/2014	0945	-	AQ	X	X	X	X	X	X	X	X	X	X	X	X	X		19
HA14-PB13S (OW)	7/10/2014	1140	-	AQ	X	X	X	X	X	X	X	X	X	X	X	X	X		19
LIQUID																			
VOA Vial					X				X										
Amber Glass						X	X				X								
Plastic Bottle								X		X		X	X	X	X	X	X		
Preservative					AF	A	AH	A	AH	C	AE	AD	A	AC	A	A	DB		
Volume (mL)					40	1000	1000	1000	1000	250	1000	500	500	250	500	250	250		
SOLID																			
VOA Vial																			
Amber Glass																			
Clear Glass																			
Preservative																			
Volume																			

Analysis Requested

Comments (special instructions, precautions, additional method numbers, etc.)

Laboratory to use applicable DEP CAM methods, unless otherwise directed.

8. NPDES list of metals: Cd, Cr, Cu, Pb, Ni, Ag, Zn, As, Se, Sb, Hg and Fe

14. Please hold field filtered dissolved metals

Sampled and Relinquished by	Received by
Sign: Dastjerdi	Sign: Desmond Crawford
Print: Negar Dastjerdi	Print: Desmond Crawford
Firm: H&A	Firm: Haley + Aldrich
Date: 7/10/14 Time:	Date: 7/10/14 Time: 1600
Relinquished by	**Received by**
Sign: Desmond Crawford	Sign: Pedro Perez
Print: Desmond Crawford	Print: Pedro Perez
Firm: Haley + Aldrich	Firm: Alpha
Date: 7/10/14 Time: 1630	Date: 7/10/14 Time: 17:44
Relinquished by	**Received by**
Sign: Pedro Perez	Sign: Richard Scott
Print: Pedro Perez	Print: Richard Scott
Firm: Alpha	Firm: Alpha
Date: 7/10/14 Time: 19:25	Date: 7/10/14 Time: 19:25

Sampling Comments

*Sample submitted for NPDES RGP permit application. Please follow appropriate testng methods and minimum detection levels as required by the EPA for the RGP.

Evidence samples were tampered with? YES NO
If YES, please explain in section below.

PRESERVATION KEY

A	Sample chilled	C	NaOH	E	H_2SO_4	G	Methanol
B	Sample filtered	D	HNO_3	F	HCL	H	Water (Na2S2O3 (circle))

Presumptive Certainty Data Package (Laboratory to use applicable DEP CAM methods)

If Presumptive Certainty Data Package is needed, initial all sections:

_____ The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty.

_____ Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.

_____ This Chain of Custody Record (specify) _____ includes ___X___ does not include samples defined as Drinking Water Samples.

_____ If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable)_____ analyze

Required Reporting Limits and Data Quality Objectives

- ☐ RC-S1
- ☐ RC-S2
- ☐ RC-GW1
- ☒ RC-GW2
- ☐ S1
- ☐ S2
- ☐ S3
- ☐ GW1
- ☐ GW2
- ☐ GW3

WHITE - Laboratory CANARY - Project Manager PINK - Haley & Aldrich Laboratory GOLDENROD - Haley & Aldrich Contact

APRIL 2011

ANALYTICAL REPORT

Lab Number:	L1415828
Client:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129-1400
ATTN:	Iliana Alvarado
Phone:	(617) 886-7448
Project Name:	PROPOSED PARTNERS HEALTHCARE
Project Number:	40798-015
Report Date:	07/21/14

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415828
Report Date: 07/21/14

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1415828-01	HA14-PB10S (OW)	WATER	Not Specified	07/15/14 16:55	07/16/14
L1415828-02	HA14-PB13S (OW)	WATER	Not Specified	07/15/14 15:54	07/16/14

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415828
Project Number: 40798-015 **Report Date:** 07/21/14

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Cristen Walker

Title: Technical Director/Representative Date: 07/21/14

INORGANICS
&
MISCELLANEOUS

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415828
Report Date: 07/21/14

SAMPLE RESULTS

Lab ID: L1415828-01
Client ID: HA14-PB10S (OW)
Sample Location: Not Specified
Matrix: Water

Date Collected: 07/15/14 16:55
Date Received: 07/16/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
TPH	ND		mg/l	4.00	--	1	07/18/14 12:00	07/19/14 14:00	74,1664A	ML

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415828
Report Date: 07/21/14

SAMPLE RESULTS

Lab ID: L1415828-02
Client ID: HA14-PB13S (OW)
Sample Location: Not Specified
Matrix: Water

Date Collected: 07/15/14 15:54
Date Received: 07/16/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
TPH	ND		mg/l	4.00	--	1	07/18/14 12:00	07/19/14 14:00	74,1664A	ML

Project Name: PROPOSED PARTNERS HEALTHCAR **Lab Number:** L1415828

Project Number: 40798-015 **Report Date:** 07/21/14

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG706931-1										
TPH	ND		mg/l	4.00	--	1	07/18/14 12:00	07/19/14 14:00	74,1664A	ML

Lab Control Sample Analysis

Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE

Project Number: 40798-015

Lab Number: L1415828

Report Date: 07/21/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG706931-2								
TPH	85		-		64-132	-		34

Matrix Spike Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415828
Report Date: 07/21/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG706931-4 QC Sample: L1415828-02 Client ID: HA14-PB13S (OW)												
TPH	ND	21.1	16.4	78		-	-		64-132	-		34

Lab Duplicate Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415828
Report Date: 07/21/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG706931-3 QC Sample: L1415828-01 Client ID: HA14-PB10S (OW)						
TPH	ND	ND	mg/l	NC		34

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1415828
Report Date: 07/21/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1415828-01A	Amber 1000ml HCl preserved	A	N/A	2.8	Y	Absent	TPH-1664(28)
L1415828-01B	Amber 1000ml HCl preserved	A	N/A	2.8	Y	Absent	TPH-1664(28)
L1415828-02A	Amber 1000ml HCl preserved	A	N/A	2.8	Y	Absent	TPH-1664(28)
L1415828-02B	Amber 1000ml HCl preserved	A	N/A	2.8	Y	Absent	TPH-1664(28)

*Values in parentheses indicate holding time in days

Project Name:	PROPOSED PARTNERS HEALTHCARE	**Lab Number:**	L1415828
Project Number:	40798-015	**Report Date:**	07/21/14

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
G	- The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

Report Format: Data Usability Report

Project Name:	PROPOSED PARTNERS HEALTHCARE	**Lab Number:**	L1415828
Project Number:	40798-015	**Report Date:**	07/21/14

Data Qualifiers

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1415828
Project Number: 40798-015 **Report Date:** 07/21/14

REFERENCES

74 Method 1664,Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

Last revised April 15, 2014

The following analytes are not included in our NELAP Scope of Accreditation:

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

HALEY & ALDRICH

Haley & Aldrich, Inc.
465 Medford St.,
Suite 2200,
Boston, MA 02129-1402

CHAIN OF CUSTODY RECORD

L1415824

Phone (617) 886-7400
Fax (617) 886-7600

Page 1 of 1

H&A FILE NO.	40798-015	LABORATC	ALPHA ANALYTICAL	DELIVERY DATE	7/15/14
PROJECT NAME	Proposed Partners HealthCare Administrative Campus	ADDRESS	WESTBOROUGH, MA	TURNAROUND TIME	5 Day
H&A CONTACT	Casey Bartlett, 617-886-7476, CBartlett@HaleyAldrich.com	CONTACT	Gina Hall, 508-439-5155, GBartolomeo@AlphaLab.com	PROJECT MANAGER	Iliana Alvarado

Analysis Requested

Sample No.	Date	Time	Depth	Type	1. VOCs 8260C-SIM	2. SVOCS 8270/8270-SIM	3. PCBs 608	4. TSS 160.2	5. EDB 504.1	6. PAC, ACN	7. Total Phenol 420.1	8. Total Metals	9. TRC 330.1	10. TCN 335.2	11. Hex Cr SM 3500	13. Chloride-300	14. Dissolved Metals	15. TPH	Number of Containers
HA14-PB10S (OW)	7/15/14	1655	-	AQ														X	2
HA14-PB13S (OW)	7/15/14	1554	-	AQ														X	2

Comments (special instructions, precautions, additional method numbers, etc.)

Laboratory to use applicable DEP CAM methods, unless otherwise directed.

8. NPDES list of metals: Cd, Cr, Cu, Pb, Ni, Ag, Zn, As, Se, Sb, Hg and Fe

14. Please hold field filtered dissolved metals

LIQUID

	1. VOCs 8260C-SIM	2. SVOCS 8270/8270-SIM	3. PCBs 608	4. TSS 160.2	5. EDB 504.1	6. PAC, ACN	7. Total Phenol 420.1	8. Total Metals	9. TRC 330.1	10. TCN 335.2	11. Hex Cr SM 3500	13. Chloride-300	14. Dissolved Metals	15. TPH	Number of Containers
VOA Vial	X				X										
Amber Glass		X	X				X								
Plastic Bottle				X		X		X	X	X	X	X	X		
Preservative	AF	A	AH	A	AH	C	AE	AD	A	AC	A	A	D		
Volume (mL)	40	1000	1000	1000	1000	250	1000	500	500	250	500	250	250		

SOLID

VOA Vial															
Amber Glass															
Clear Glass															
Preservative															
Volume															

PRESERVATION KEY

A	Sample chilled	C	NaOH	E	H_2SO_4	G	Methanol
B	Sample filtered	D	HNO_3	F	HCL	H	Water (Na2S2O3 (circle))

Sampled and Relinquished by	Received by
Sign Dastjerdi	Sign M. Auto
Print Negar Dastjerdi	Print M. Ayse
Firm H&A	Firm H&A
Date 7/15/14 Time	Date 7/16/14 Time 16:30
Relinquished by	**Received by**
Sign M. Auto	Sign [illegible]
Print M. Ayse	Print Wayne Plummer
Firm H&A	Firm Alpha
Date 7/16/14 Time 16:30	Date 7/16/14 Time 1650
Relinquished by	**Received by**
Sign [illegible]	Sign Richard Scott
Print Wayne Plummer	Print Richard Scott
Firm Alpha	Firm Alpha
Date 7/16/14 Time 1900	Date 7/16/14 Time 1900

Sampling Comments

*Sample submitted for NPDES RGP permit application. Please follow appropriate testng methods and minimum detection levels as required by the EPA for the RGP.

Evidence samples were tampered with? YES NO

If YES, please explain in section below.

Presumptive Certainty Data Package (Laboratory to use applicable DEP CAM methods)

If Presumptive Certainty Data Package is needed, initial all sections:

_____ The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty.

_____ Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.

_____ This Chain of Custody Record (specify) _____ includes ___X___ does not include samples defined as Drinking Water Samples.

_____ If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable)_____ analyze

Required Reporting Limits and Data Quality Objectives

- ☐ RC-S1
- ☐ RC-S2
- ☐ RC-GW1
- ☒ RC-GW2
- ☐ S1
- ☐ S2
- ☐ S3
- ☐ GW1
- ☐ GW2
- ☐ GW3

WHITE - Laboratory CANARY - Project Manager PINK - Haley & Aldrich Laboratory GOLDENROD - Haley & Aldrich Contact

APRIL 2011

Form 3003

ANALYTICAL REPORT

Lab Number:	L1416665
Client:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129-1400
ATTN:	Iliana Alvarado
Phone:	(617) 886-7448
Project Name:	PROPOSED PARTNERS HEALTHCARE
Project Number:	40798-015
Report Date:	07/28/14

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1416665
Report Date: 07/28/14

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1416665-01	HA14-PB10S (OW)	WATER	Not Specified	07/10/14 09:45	07/10/14
L1416665-02	HA14-PB13S (OW)	WATER	Not Specified	07/10/14 11:40	07/10/14

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1416665
Project Number: 40798-015 **Report Date:** 07/28/14

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Michelle M. Morris

Title: Technical Director/Representative Date: 07/28/14

METALS

Project Name:	PROPOSED PARTNERS HEALTHCARE	**Lab Number:**	L1416665
Project Number:	40798-015	**Report Date:**	07/28/14

SAMPLE RESULTS

Lab ID:	L1416665-01	Date Collected:	07/10/14 09:45
Client ID:	HA14-PB10S (OW)	Date Received:	07/10/14
Sample Location:	Not Specified	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Westborough Lab											
Iron, Dissolved	9.6		mg/l	0.05	--	1	07/28/14 11:01	07/28/14 11:47	NA	19,200.7	TT

Project Name:	PROPOSED PARTNERS HEALTHCARE	**Lab Number:**	L1416665
Project Number:	40798-015	**Report Date:**	07/28/14

SAMPLE RESULTS

Lab ID:	L1416665-02	Date Collected:	07/10/14 11:40
Client ID:	HA14-PB13S (OW)	Date Received:	07/10/14
Sample Location:	Not Specified	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Westborough Lab											
Iron, Dissolved	1.6		mg/l	0.05	--	1	07/28/14 11:01	07/28/14 11:32	NA	19,200.7	TT

Project Name: PROPOSED PARTNERS HEALTHCARE **Lab Number:** L1416665

Project Number: 40798-015 **Report Date:** 07/28/14

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01-02 Batch: WG709189-1										
Iron, Dissolved	ND		mg/l	0.05	--	1	07/28/14 11:01	07/28/14 11:24	19,200.7	TT

Prep Information

Digestion Method: NA

Lab Control Sample Analysis

Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE

Project Number: 40798-015

Lab Number: L1416665

Report Date: 07/28/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01-02 Batch: WG709189-2								
Iron, Dissolved	96		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1416665
Report Date: 07/28/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG709189-4 QC Sample: L1416665-02 Client ID: HA14-PB13S (OW)												
Iron, Dissolved	1.6	2	3.6	100		-	-		75-125	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1416665
Report Date: 07/28/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG709189-3 QC Sample: L1416665-02 Client ID: HA14-PB13S (OW)						
Iron, Dissolved	1.6	1.7	mg/l	6		20

Project Name: PROPOSED PARTNERS HEALTHCARE
Project Number: 40798-015

Lab Number: L1416665
Report Date: 07/28/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information	Custody Seal
Cooler	
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1416665-01A	Plastic 250ml HNO3 preserved	B	<2	3.9	Y	Absent	FE-RI(180)
L1416665-02A	Plastic 250ml HNO3 preserved	B	<2	3.9	Y	Absent	FE-RI(180)

Container Comments

L1416665-01A

L1416665-02A

*Values in parentheses indicate holding time in days

Project Name:	PROPOSED PARTNERS HEALTHCARE	**Lab Number:**	L1416665
Project Number:	40798-015	**Report Date:**	07/28/14

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
G	- The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

Report Format: Data Usability Report

Project Name:	PROPOSED PARTNERS HEALTHCARE	**Lab Number:**	L1416665
Project Number:	40798-015	**Report Date:**	07/28/14

Data Qualifiers

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

REFERENCES

19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

Last revised April 15, 2014

The following analytes are not included in our NELAP Scope of Accreditation:

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F,**
EPA 353.2: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

L1416665 ER 7/25/14

HALEY & ALDRICH

Haley & Aldrich, Inc.
465 Medford St.,
Suite 2200,
Boston, MA 02129-1402

CHAIN OF CUSTODY RECORD

~~L1415327~~

Phone (617) 886-7400
Fax (617) 886-7600

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H&A FILE NO.	40798-015	LABORATORY	ALPHA ANALYTICAL	DELIVERY DATE	7/10/14
PROJECT NAME	Proposed Partners HealthCare Administrative Campus	ADDRESS	WESTBOROUGH, MA	TURNAROUND TIME	5 Day
H&A CONTACT	Casey Bartlett, 617-886-7476, CBartlett@HaleyAldrich.com	CONTACT	Gina Hall, 508-439-5155, GBartolomeo@AlphaLab.com	PROJECT MANAGER	Iliana Alvarado

FE-RI, PREPR

Analysis Requested

	Sample No.	Date	Time	Depth	Type	1. VOCs 8260C-SIM	2. SVOCs 8270/8270-SIM	3. PCBs 608	4. TSS 160.2	5. EDB 504.1	6. PAC, ACN	7. Total Phenol 420.1	8. Total Metals	9. TRC 330.1	10. TCN 335.2	11. Hex Cr SM 3500	13. Chloride-300	14. Dissolved Metals		Number of Containers
-01	HA14-PB10S (OW)	7/10/2014	0945	-	AQ	X	X	X	X	X	X	X	X	X	X	X	X	X	X	19
-02	HA14-PB13S (OW)	7/10/2014	1140	-	AQ	X	X	X	X	X	X	X	X	X	X	X	X	X	X	19

Comments (special instructions, precautions, additional method numbers, etc.)

Laboratory to use applicable DEP CAM methods, unless otherwise directed.

8. NPDES list of metals: Cd, Cr, Cu, Pb, Ni, Ag, Zn, As, Se, Sb, Hg and Fe

14. Please hold field filtered dissolved metals

	1. VOCs 8260C-SIM	2. SVOCs 8270/8270-SIM	3. PCBs 608	4. TSS 160.2	5. EDB 504.1	6. PAC, ACN	7. Total Phenol 420.1	8. Total Metals	9. TRC 330.1	10. TCN 335.2	11. Hex Cr SM 3500	13. Chloride-300	14. Dissolved Metals		
LIQUID															
VOA Vial	X				X										
Amber Glass		X	X				X								
Plastic Bottle				X		X		X	X	X	X	X	X		
Preservative	AF	A	AH	A	AH	C	AE	AD	A	AC	A	A	DB		
Volume (mL)	40	1000	1000	1000	1000	250	1000	500	500	250	500	250	250		
SOLID															
VOA Vial															
Amber Glass															
Clear Glass															
Preservative															
Volume															

Sampled and Relinquished by	Received by
Sign: Dastjerdi	Sign: Desmond Crawford
Print: Negar Dastjerdi	Print: Desmond Crawford
Firm: H&A	Firm: Haley + Aldrich
Date: 7/10/14 Time:	Date: 7/10/14 Time: 1600
Relinquished by	**Received by**
Sign: Desmond Crawford	Sign: Pedro Perez
Print: Desmond Crawford	Print: Pedro Perez
Firm: Haley + Aldrich	Firm: Alpha
Date: 7/10/14 Time: 1630	Date: 7/10/14 Time: 17:44
Relinquished by	**Received by**
Sign: Pedro Perez	Sign: Richard Scott
Print: Pedro Perez	Print: Richard Scott
Firm: Alpha	Firm: Alpha
Date: 7/10/14 Time: 19:25	Date: 7/10/14 Time: 19:25

Sampling Comments

*Sample submitted for NPDES RGP permit application. Please follow appropriate testng methods and minimum detection levels as required by the EPA for the RGP.

Evidence samples were tampered with? YES NO

If YES, please explain in section below.

PRESERVATION KEY

A	Sample chilled	C	NaOH	E	H_2SO_4
B	Sample filtered	D	HNO_3	F	HCL
G	Methanol				
H	Water (Na2S2O3 (circle))				

Presumptive Certainty Data Package (Laboratory to use applicable DEP CAM methods)

If Presumptive Certainty Data Package is needed, initial all sections:

_____ The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty.

_____ Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.

_____ This Chain of Custody Record (specify) _____ includes ___X___ does not include samples defined as Drinking Water Samples.

_____ If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) _____ analyze

Required Reporting Limits and Data Quality Objectives

- ☐ RC-S1
- ☐ RC-S2
- ☐ RC-GW1
- ☒ RC-GW2
- ☐ S1
- ☐ S2
- ☐ S3
- ☐ GW1
- ☐ GW2
- ☐ GW3

WHITE - Laboratory CANARY - Project Manager PINK - Haley & Aldrich Laboratory GOLDENROD - Haley & Aldrich Contact APRIL 2011